

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

6

UNITED STATES OF AMERICA,

Plaintiff,

v.

CIBA SPECIALTY CHEMICALS
CORPORATION

and

NOVARTIS CORPORATION,

Defendants.

Civil Action No. 3:01cv04223 (GEB)

FILED

MAR 21 2002

WILLIAM T. WALSH
CLERK

ENTERED

on
THE DOCKET
on
WILLIAM T. WALSH, CLERK
By
(Deputy Clerk)

**ORDER GRANTING UNOPPOSED MOTION
OF UNITED STATES TO RESCIND
PREMATURE ENTRY OF CONSENT DECREE
AND TO REENTER CONSENT DECREE**

This matter having come before the Court upon the motion of the Plaintiff,
United States of America, for rescission of premature entry of the Consent Decree by this
Court on October 31, 2001, and for reentry of said Decree, the Court having considered
the request, there being no opposition by the parties hereto, and for good cause shown, it
is this 21st day of MARCH, 2002,

ORDERED, that the United States' motion is hereby granted; and it is
further

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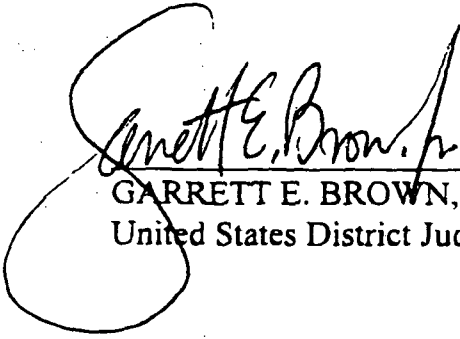


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ORDERED, that the entry of the Consent Decree on October 31, 2001, is hereby rescinded; and it further

ORDERED, that the settlement embodied in the Consent Decree is fair, reasonable, and in the public interest, and the Consent Decree is hereby reentered as an order of this Court as of the date hereof.

Dated: MARCH 21, 2002



GARRETT E. BROWN, JR.
United States District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

UNITED STATES OF AMERICA

Plaintiff,

v.

CIBA SPECIALTY CHEMICALS
CORPORATION, and
NOVARTIS CORPORATION

Defendants.

CIVIL ACTION NO.

01-4223(6EB)

RD/RA CONSENT DECREE

FILED

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CLERK

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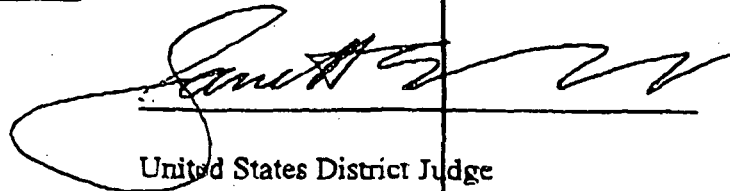
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By WILLIAM T. WALSH, CLERK
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requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including, but not limited to, service of a summons.

XXXIV. FINAL JUDGMENT

118. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between and among the United States and the Settling Defendants. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

SO ORDERED THIS 31st DAY OF OCTOBER, 2001.



United States District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

UNITED STATES OF AMERICA

Plaintiff,

v.

CIBA SPECIALTY CHEMICALS
CORPORATION, and
NOVARTIS CORPORATION

Defendants.

CIVIL ACTION NO. _____

RD/RA CONSENT DECREE

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I. BACKGROUND

A. The United States of America ("United States"), on behalf of the Administrator of the United States Environmental Protection Agency ("EPA"), filed a complaint in this matter naming Ciba Specialty Chemicals Corporation and Novartis Corporation as defendants pursuant to Sections 106 and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. §§ 9606, 9607.

B. The United States in its complaint seeks, inter alia: (1) reimbursement of costs incurred by EPA and the Department of Justice for response actions at the Ciba-Geigy Superfund Site in Toms River, New Jersey, together with accrued interest; and (2) performance of studies and response work by the Settling Defendants at the Site consistent with the National Contingency Plan, 40 C.F.R. Part 300 (as amended) ("NCP").

C. In accordance with the NCP and Section 121(f)(1)(F) of CERCLA, 42 U.S.C. § 9621(f)(1)(F), EPA notified the State of New Jersey (the "State") on January 25, 2001, of negotiations with potentially responsible parties regarding the implementation of the remedial design and remedial action for the Site, and EPA has provided the State with an opportunity to participate in such negotiations and be a party to this Consent Decree. In a letter dated October 25, 2000 from Assistant Commissioner Susan B. Boyle of the New Jersey Department of Environmental Protection to Deputy Regional Administrator William Muszynski of the EPA - Region II, the State concurred with the recommended remedial design and remedial action in the ROD and agreed that it will meet all State statutes and requirements.

D. In accordance with Section 122(j)(1) of CERCLA, 42 U.S.C. § 9622(j)(1), EPA notified the U.S. Fish & Wildlife Service of the United States Department of Interior and the National Oceanic and Atmospheric Administration of the United States Department of Commerce on January 25, 2001, of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under Federal trusteeship and encouraged the trustee(s) to participate in the negotiation of this Consent Decree.

E. The defendants entering into this Consent Decree (hereinafter "Settling Defendants" whether singular or plural) do not admit any liability to the Plaintiff arising out of the transactions or occurrences alleged in the complaint, nor do they acknowledge that the release or threatened release of hazardous substance(s) at or from the Site constitutes an imminent or substantial endangerment to the public health or welfare or the environment.

F. Pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA placed the Site on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on September 8, 1983.

G. In response to a release or a substantial threat of a release of hazardous substances at or from the Site, EPA commenced a Remedial Investigation and Feasibility Study ("RI/FS") for the Site pursuant to 40 C.F.R. § 300.430. On October 18, 1995, an Administrative Order on Consent (AOC) was executed by Jeanne M. Fox, EPA Regional Administrator. This AOC allowed the Ciba-Geigy Corporation to perform a Feasibility Study for the second operable unit (hereinafter "OU2"), which consists of the Potential Source Areas at the Site in Toms River, New Jersey.

H. The Settling Defendants, completed a Draft Feasibility Study ("FS") Report on August 31, 1999. A Final Feasibility Study Report was completed on July 11, 2000.

I. Pursuant to Section 117 of CERCLA, 42 U.S.C. § 9617, EPA published notice of the completion of the FS and of the proposed plan for remedial action on June 8, 2000, in a major local newspaper of general circulation. EPA held two public meetings on June 15 and July 12, 2000 to discuss the proposed plan. Also, EPA provided an opportunity for written and oral comments from the public on the proposed plan for remedial action. Copies of the transcripts of the public meetings are available to the public as part of the administrative record upon which the Regional Administrator based the selection of the response action.

J. The decision by EPA on the remedial action to be implemented at the Site is embodied in a final Record of Decision ("ROD"), executed on September 29, 2000, which the State had an opportunity to review and provide EPA comments. The ROD includes EPA's selected remedy for the Site as well as a responsiveness summary to the public comments. Notice of the Proposed Plan was published in accordance with Section 117(b) of CERCLA.

K. Based on the information presently available to EPA, EPA believes that the Work will be properly and promptly conducted by the Settling Defendants if conducted in accordance with the requirements of this Consent Decree and its appendices.

L. Solely for the purposes of Section 113(j) of CERCLA, the Remedial Action selected by the ROD and the Work to be performed by the Settling Defendants shall constitute a response action taken or ordered by the President.

M. The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and implementation of this Consent Decree will expedite the cleanup of the Site and will avoid prolonged and complicated litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, it is hereby Ordered, Adjudged, and Decreed:

II. JURISDICTION

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1345, and 42 U.S.C. §§ 9606, 9607, and 9613(b). This Court also has personal jurisdiction over the Settling Defendants. Solely for the purposes of this Consent Decree and the underlying complaint, Settling Defendants waive all objections and defenses that they may have to jurisdiction of the Court or to venue in this District. Settling Defendants shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree.

III. PARTIES BOUND

2. This Consent Decree applies to and is binding upon the United States and upon Settling Defendants and their successors and assigns. Any change in ownership or corporate status of a Settling Defendant including, but not limited to, any transfer of assets or real or personal property, shall in no way alter such Settling Defendant's responsibilities under this Consent Decree.

3. Settling Defendants shall provide a copy of this Consent Decree to each contractor hired to perform the Work (as defined below) required by this Consent Decree and to each person representing any Settling Defendant with respect to the Site or the Work and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this Consent Decree. Settling Defendants or their contractors shall provide written notice of the Consent Decree to all subcontractors hired to perform any portion of the Work required by this Consent Decree. Settling Defendants shall nonetheless be responsible for ensuring that their contractors and subcontractors perform the Work contemplated herein in accordance with this Consent Decree. With regard to the activities undertaken pursuant to this Consent Decree, each contractor and subcontractor shall be deemed to be in a contractual relationship with the Settling Defendants within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

IV. DEFINITIONS

4. Unless otherwise expressly provided herein, terms used in this Consent Decree which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Consent Decree or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

"Consent Decree" shall mean this Decree and all appendices attached hereto (listed in Section XXIX). In the event of conflict between this Decree and any appendix, this Decree shall control.

"Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

"Effective Date" shall be the effective date of this Consent Decree as provided in Paragraph 106.

"EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Consent Decree, verifying the Work, or otherwise implementing, overseeing, or enforcing this Consent Decree, including, but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Sections VII and IX (including, but not limited to, the cost of attorney time and any monies paid to secure access and/or to secure or implement institutional controls including, but not limited to, the amount of just compensation), Section XV, and Paragraph 87 of Section XXI. Future Response Costs shall also include all Interim Response Costs, and all Interest on the Past Response Costs that has accrued pursuant to 42 U.S.C. § 9607(a) during the period from [date of signing of this Consent Decree], 2001, to the date of entry of this Consent Decree.

"Interim Response Costs" shall mean all costs, including direct and indirect costs, (a) paid by the United States in connection with the Site between February 2, 2001 (and payroll costs from January 27, 2001) and the Effective Date, or (b) incurred by the United States in

connection with the Site prior to the Effective Date but paid after that date; provided, however, that Interim Response Costs do not include response costs incurred by the United States to oversee response actions by the Settling Defendants pursuant to either the previously executed Consent Decree (Civil Action No. 93-4675, entered December 1, 1993), or the Administrative Order on Consent (Index No. 11-CERCLA-95-0105, effective October 18, 1995.)

"Interest," shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

"NJDEP" shall mean the New Jersey Department of Environmental Protection and any successor departments or agencies of the State.

"Operation and Maintenance" or "O & M" shall mean all activities required to maintain the effectiveness of the Remedial Action as required under the Operation and Maintenance Plan approved or developed by EPA pursuant to this Consent Decree and the Statement of Work ("SOW").

"OU1 Consent Decree" shall mean the Consent Decree entered December 1, 1993 (as corrected on June 13, 1994), in Civil Action No. 93-4675 governing payment of EPA's response costs in connection with, and implementation of, the Record of Decision issued on April 24, 1989 which was modified by an Explanation of Significant Differences issued on September 30, 1993, calling for, inter alia, pumping and treating contaminated groundwater and recharging treated groundwater.

"Paragraph" shall mean a portion of this Consent Decree identified by an arabic numeral or an upper case letter.

"Parties" shall mean the United States and the Settling Defendants.

"Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site for the period of June 1, 1992 through February 2, 2001 (and payroll costs from May 31, 1992 through January 27, 2001, and for which the United States has not previously received reimbursement and includes interest on all such costs which has accrued pursuant to 42 U.S.C. § 9607(a) through such date, provided, however, that "Past Response Costs" does not include those costs incurred by the United States to oversee response actions by Settling Defendants pursuant to either the previously executed Consent Decree (Civil Action No. 93-4675, entered December 1, 1993), or the Administrative Order on Consent (Index No. II-CERCLA-95-0105, effective October 18, 1995), which are covered by Bills for Collection identified by numbers 02200T084; 02298T085; and 022999T101 and currently are in dispute resolution proceedings pursuant to the referenced Consent Decree and Administrative Order on Consent.

"Performance Standards" shall mean the cleanup standards and other measures of achievement of the goals of the Remedial Action, set forth in the Remedial Action Objectives Section of the ROD and Section II of the SOW.

"Plaintiff" shall mean the United States.

"Project Coordinator" shall mean the principal coordinator retained by the Settling Defendants to supervise and direct the implementation of the Work under this Consent Decree.

"RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901 et seq. (also known as the Resource Conservation and Recovery Act).

"Record of Decision" or "ROD" or "OU2 ROD" shall mean, unless the context clearly refers otherwise, the EPA Record of Decision relating to the Second Operable Unit at the Site signed on September 29, 2000, by the Regional Administrator, EPA Region II, or his/her delegate, and all attachments thereto. The ROD is attached as Appendix A.

"Remedial Action" shall mean those activities to be undertaken by the Settling Defendants to implement the ROD in accordance with the SOW and the final Remedial Design and Remedial Action Work Plans and other plans approved by EPA.

"Remedial Action Work Plan" shall mean the document developed pursuant to Paragraph 12 of this Consent Decree and approved by EPA, and any amendments thereto.

"Remedial Design" shall mean those activities to be undertaken by the Settling Defendants to develop the final plans and specifications for the Remedial Action pursuant to the Remedial Design Work Plan.

"Remedial Design Work Plan" shall mean the document developed pursuant to Paragraph 11 of this Consent Decree and approved by EPA, and any amendments thereto.

"Section" shall mean a portion of this Consent Decree identified by a roman numeral.

"Settling Defendants" shall mean the Ciba Specialty Chemicals Corporation and Novartis Corporation.

"Site" shall mean the Ciba-Geigy Superfund Site located in Toms River, Ocean County, New Jersey and depicted generally on the map attached as Appendix C. The Site includes the areal extent of contamination where hazardous substances have migrated or are migrating, and all suitable areas in very close proximity to the contamination necessary for implementation of the response action.

"State" shall mean the State of New Jersey.

"Statement of Work" or "SOW" shall mean the Statement of Work for implementation of the Remedial Design and Remedial Action, including long-term operation and monitoring and maintenance, at the Site, as set forth in Appendix B to this Consent Decree and any modifications made in accordance with this Consent Decree.

"United States" shall mean the United States of America.

"Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of RCRA, 42

U.S.C. § 6903(27); and (4) any "hazardous substances" as defined under the New Jersey Industrial Site Recovery Act, as amended by the Hazardous Discharge Remediation Act, P.L. 1993, c. 139, and the Brownfield and Contaminated Site Remediation Act, P.L. 1997, c. 278, as codified at N.J.S.A. 13:1K-6 et seq.

"Work" shall mean all activities Settling Defendants are required to perform under this Consent Decree, except those required by Section XXV (Retention of Records).

V. GENERAL PROVISIONS

5. Objectives of the Parties. The objectives of the Parties in entering into this Consent Decree are to protect public health or welfare or the environment at the Site by the design and implementation of response actions at the Site by the Settling Defendants, to reimburse response costs of the Plaintiffs, and to resolve the claims of Plaintiffs against Settling Defendants as provided in this Consent Decree. Nothing in this Consent Decree shall affect the validity of the OU1 Consent Decree, which remains in full force and effect. Each consent decree shall be interpreted in accordance with its terms.

6. Commitments by Settling Defendants. Settling Defendants shall finance and perform the Work in accordance with this Consent Decree, the ROD, the SOW, and all work plans and other plans, standards, specifications, and schedules set forth herein or developed by Settling Defendants and approved by EPA pursuant to this Consent Decree. Settling Defendants shall also reimburse the United States for Past Response Costs and Future Response Costs as provided in this Consent Decree. Settling Defendant Ciba Specialty Chemicals Corporation shall perform the work and Settling Defendant Novartis Corporation shall remain legally liable as the successor to Ciba-Geigy Corporation. Notwithstanding the prior sentence in this paragraph 6, both Settling Defendants shall remain jointly and severally liable with respect to the performance of all of the Settling Defendants' obligations required by this Consent Decree. Nothing in this Consent Decree shall modify, supersede or amend prior agreements among and between the Settling Defendants.

7. Compliance With Applicable Law. All activities undertaken by Settling Defendants pursuant to this Consent Decree shall be performed in accordance with the requirements of all applicable federal and state laws and regulations. Settling Defendants must also comply with all applicable or relevant and appropriate requirements of all Federal and state environmental laws as set forth in the ROD and the SOW. The activities conducted pursuant to this Consent Decree, if approved by EPA, shall be considered to be consistent with the NCP.

8. Permits.

a. As provided in Section 121(e) of CERCLA and Section 300.400(e) of the NCP, no permit shall be required for any portion of the Work conducted entirely on-site (i.e., within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work). Where any portion of the Work that is not on-site requires a federal or state permit or approval, Settling Defendants shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.

b. The Settling Defendants may seek relief under the provisions of Section XVIII (Force Majeure) of this Consent Decree for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit required for the Work.

c. This Consent Decree is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

9. Notice to Successors-in-Title.

a. With respect to any property owned or controlled by the Settling Defendants that is located within the Site, within 15 days after the entry of this Consent Decree, the Settling Defendants shall submit to EPA for review and approval a notice to be filed with the Clerk of Ocean County, State of New Jersey, which shall provide notice to all successors-in-title that the property is part of the Site, that EPA selected a remedy for the Site on September 29, 2000, and that the Settling Defendants have entered into a Consent Decree requiring implementation of the remedy. Such notice(s) shall identify the United States District Court in which the Consent Decree was filed, the name and civil action number of this case, and the date the Consent Decree was entered by the Court. The Settling Defendants shall record the notice(s) within 10 days of EPA's approval of the notice(s). The Settling Defendants shall provide EPA with a certified copy of the recorded notice(s) within 10 days of recording such notice(s).

b. At least 30 days prior to the conveyance of any interest in property located within the Site including, but not limited to, fee interests, leasehold interests, and mortgage interests, the Settling Defendant(s) conveying the interest shall give the grantee written notice of (i) this Consent Decree, (ii) any instrument by which an interest in real property has been conveyed that confers a right of access to the Site (hereinafter referred to as "access easements") pursuant to Section IX (Access and Institutional Controls), and (iii) any instrument by which an interest in real property has been conveyed that confers a right to enforce restrictions on the use of such property (hereinafter referred to as "restrictive easements") pursuant to Section IX (Access and Institutional Controls). At least 30 days prior to such conveyance, the Settling Defendants conveying the interest shall also give written notice to EPA and the State of the proposed conveyance, including the name and address of the grantee, and the date on which notice of the Consent Decree, access easements, and/or restrictive easements was given to the grantee.

c. In the event of any such conveyance, the Settling Defendants' obligations under this Consent Decree, including, but not limited to, the obligation to provide or secure access and institutional controls, as well as to abide by such institutional controls, pursuant to Section IX (Access and Institutional Controls) of this Consent Decree, shall continue to be met by the Settling Defendants. In no event shall the conveyance release or otherwise affect the liability of the Settling Defendants to comply with all provisions of this Consent Decree, absent the prior written consent of EPA. If the United States approves, the grantee may perform some or all of the Work under this Consent Decree.

VI. PERFORMANCE OF THE WORK BY SETTLING DEFENDANT

10. Project Coordinator

a. All aspects of the Work to be performed by Settling Defendants pursuant to Sections VI (Performance of the Work by Settling Defendant), VII (Remedy Review), VIII (Quality Assurance, Sampling and Data Analysis), and XV (Emergency Response) of this Consent Decree shall be under the direction and supervision of the Settling Defendants' Project Coordinator (see Paragraph 43). If at any time thereafter, Settling Defendants propose to change a Project Coordinator, Settling Defendants shall give such notice to EPA, and must obtain an

authorization to proceed from EPA before the new Project Coordinator performs, directs, or supervises any Work under this Consent Decree (see Section XII).

b. If EPA disapproves a proposed Project Coordinator, EPA will notify Settling Defendants in writing. Settling Defendants shall submit to EPA a list of contractors, including the qualifications of each contractor, that would be acceptable to them within 30 days of receipt of EPA's disapproval of the contractor previously proposed. EPA will provide written notice of the names of any contractor(s) that it disapproves and an authorization to proceed with respect to any of the other contractors. Settling Defendants may select any contractor from that list that is not disapproved and shall notify EPA of the name of the contractor selected within 21 days of EPA's authorization to proceed.

c. If EPA fails to provide written notice of its authorization to proceed or disapproval as provided in this Paragraph and this failure prevents the Settling Defendants from meeting one or more deadlines in a plan approved by the EPA pursuant to this Consent Decree, Settling Defendants may seek relief under the provisions of Section XVIII (Force Majeure) hereof.

11. Remedial Design.

a. Within 45 days after the lodging of this Consent Decree with the Court, Settling Defendants shall submit to EPA a work plan for the design of the Remedial Action at the Site ("Remedial Design Work Plan" or "RD Work Plan"). The Remedial Design Work Plan shall provide for design of the remedy set forth in the ROD, in accordance with the SOW and for achievement of the Performance Standards and other requirements set forth in the ROD, this Consent Decree and/or the SOW. Upon its approval by EPA, the Remedial Design Work Plan shall be incorporated into and become enforceable under this Consent Decree. As part of the Remedial Design Work Plan, the Settling Defendants shall submit to EPA a Health and Safety Plan for field design activities which conforms to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120.

b. The Remedial Design Work Plan shall include plans and schedules for implementation of all remedial design and pre-design activities identified in the SOW, including, but not limited to, plans and schedules for the completion of: pre-design activities, i.e. chemical and geotechnical testing and collection of air monitoring data, and design activities, i.e. air monitoring, drum handling, transportation and disposal, soil excavation, ex-situ bioremediation of soils, groundwater extraction and recharge system optimization, lime stabilization area remediation, deed restrictions, perched water management, in-situ groundwater bioremediation, community relations and emergency management. Also, additional design tasks may include the following items: (1) design sampling and analysis plan (including, but not limited to, a Remedial Design Quality Assurance Project Plan (RD QAPP) in accordance with Section VIII (Quality Assurance, Sampling and Data Analysis)); (2) a preliminary design; (3) an intermediate design, if required by EPA; (4) a pre-final/final design; and (5) a Construction Quality Assurance Plan. In addition, the Remedial Design Work Plan shall include a schedule for completion of the Remedial Action Work Plan and the method of selection of Remedial Action contractors.

c. Upon approval of the Remedial Design Work Plan by EPA, and submittal of the Health and Safety Plan for all field activities to EPA, Settling Defendants shall implement the Remedial Design Work Plan. The Settling Defendants shall submit to EPA all plans, submittals and other deliverables required under the approved Remedial Design Work Plan in

accordance with the approved schedule for review and approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Unless otherwise directed by EPA, Settling Defendants shall not commence further Remedial Design activities at the Site prior to approval of the Remedial Design Work Plan.

d. The preliminary design submittal shall include, at a minimum, the following: (1) design criteria; (2) results of treatability studies; (3) results of additional field sampling and pre-design work; (4) project delivery strategy; (5) preliminary plans, drawings and sketches; (6) required specifications in outline form; and (7) preliminary construction schedule.

e. The intermediate design submittal, if required by EPA, shall be a continuation and expansion of the preliminary design. Any value engineering proposals must be identified and evaluated during this review.

f. The pre-final/final design submittal shall include those requirements detailed in the attached SOW, including, at a minimum: (1) final plans and specifications; (2) Construction Quality Assurance Project Plan (CQAPP); (3) Contingency Plan; and, (4) Long-Term Monitoring Outline. The CQAPP, which shall detail the approach to quality assurance during construction activities at the Site, shall specify a quality assurance official ("QA Official"), independent of any Remedial Action contractor(s), to conduct a quality assurance program during the construction phase of the project.

12. Remedial Action.

a. Within 45 days of EPA's approval of the Remedial Design, the Settling Defendants shall award the initial Remedial Action contract (See Section X of the SOW). However, should the entry of this Consent Decree by the Court not be completed at the time of the Remedial Design approval, the Settling Defendants shall award the initial Remedial Action contract within 45 days from the entry of this Consent Decree.

b. Within 45 days after the award of RA contracts, the Settling Defendants shall submit to EPA a work plan for the performance of the Remedial Action at the Site ("Remedial Action Work Plan"). The Remedial Action Work Plan shall provide for construction and implementation of the remedy set forth in the ROD and achievement of the Performance Standards, in accordance with this Consent Decree, the ROD, the SOW, and the design plans and specifications developed in accordance with the Remedial Design Work Plan and approved by EPA. Upon its approval by EPA, the Remedial Action Work Plan shall be incorporated into and become enforceable under this Consent Decree. At the same time as they submit the Remedial Action Work Plan, Settling Defendants shall submit to EPA a Health and Safety Plan for field activities required by the Remedial Action Work Plan which conforms to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120.

c. The Remedial Action Work Plan shall address the following: air monitoring, drum handling, transportation and disposal, soil excavation, ex-situ bioremediation of soils, groundwater extraction and recharge system optimization, lime sludge area remediation where required based on design, deed restrictions, perched water management, in-situ groundwater bioremediation, community relations and emergency management activities for which methodologies, plans and schedules should be included in the Remedial Action Work Plan. The methods for implementation of the Remedial Action shall be included in the Site

Management Plan as detailed in the attached SOW, and may include the following: (1) the schedule for completion of the Remedial Action; (2) schedule for developing and submitting other required Remedial Action plans; (3) methodology for implementation of the Construction Quality Assurance Plan; (4) methods for satisfying permitting requirements; (5) methodology for implementation of a Monitoring Plan; (6) methodology for implementation of the Contingency Plan; (7) tentative formulation of the Remedial Action team; (8) construction quality control plan (by constructor); and (9) procedures and plans for the decontamination of equipment and the disposal of contaminated materials. The Remedial Action Work Plan also shall include a schedule for implementation of all Remedial Action tasks identified in the final design submittal and shall identify the initial formulation of the Settling Defendants' Remedial Action Project Team (including, but not limited to, the Project Coordinator). The Work Plan shall also include the plans required by the SOW.

d. Upon approval of the Remedial Action Work Plan by EPA, Settling Defendants shall implement the activities required under the Remedial Action Work Plan. The Settling Defendants shall submit to EPA all plans, submittals, or other deliverables required under the approved Remedial Action Work Plan in accordance with the approved schedule for review and approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Unless otherwise directed by EPA, Settling Defendants shall not commence physical Remedial Action activities at the Site prior to approval of the Remedial Action Work Plan.

13. The Settling Defendants shall continue to implement the Remedial Action and Long-Term Monitoring Plan until the Performance Standards are achieved and for so long thereafter as is otherwise required under this Consent Decree.

14. Modification of the SOW or Related Work Plans.

a. If EPA determines that modification to the work specified in the SOW and/or in work plans developed pursuant to the SOW is necessary to achieve and maintain the Performance Standards or to carry out and maintain the effectiveness of the remedy set forth in the ROD, EPA may require that such modification be incorporated in the SOW and/or such work plans. Provided, however, that a modification may only be required pursuant to this Paragraph to the extent that it is consistent with the scope of the remedy selected in the ROD.

b. For the purposes of this Paragraph 14 and Paragraphs 50 and 51 only, the "scope of the remedy selected in the ROD" is as follows:

On-site bioremediation of approximately 145,000 cubic yards of contaminated soil.

Off-site treatment and/or disposal of approximately 5,000 cubic yards of contaminated soil containing material which is not suited to bioremediation. This volume represents an estimate and is subject to change based on field sampling.

Off-site treatment and disposal of approximately 19,500 drums of filtercakes and lab wastes containing high levels of organic contaminants. The number of drums that will require treatment prior to disposal is an estimate subject to change based on field sampling.

Off-site disposal of approximately 12,350 drums of solid waste and other material containing low levels of organic contaminants.

Installation of caps and barrier walls in areas of the Site where the Cohansey Yellow Clay is present. This perched water management system will prevent the movement of contaminants from the clay into the underlying Primary Cohansey Aquifer. The cap in the Filtercake Disposal Area will also address the potential direct contact risks associated with the surface soils in this area.

Implementation of an in-situ bioremediation system in the Equalization Basins to address contamination below the groundwater table.

Stabilization of portions of the Lime Sludge Disposal Area that do not meet leaching standards.

Establishment of deed restrictions to regulate the use of certain areas of the Site and prevent intrusive activities in areas that are capped.

Optimization of the Groundwater Extraction and Recharge System implemented as part of the first operable unit response action.

Appropriate environmental monitoring to ensure the effectiveness of the Selected Remedy.

c. If Settling Defendants object to any modification determined by EPA to be necessary pursuant to this Paragraph, they may seek dispute resolution pursuant to Section XIX (Dispute Resolution), Paragraph 68 (record review). The SOW and/or related work plans shall be modified in accordance with final resolution of the dispute.

d. Settling Defendants shall implement any work required by any modifications incorporated in the SOW and/or in work plans developed pursuant to the SOW in accordance with this Paragraph.

e. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions as otherwise provided in this Consent Decree.

15. Settling Defendants acknowledge and agree that nothing in this Consent Decree, the SOW, or the Remedial Design or Remedial Action Work Plans constitutes a warranty or representation of any kind by Plaintiffs that compliance with the work requirements set forth in the SOW and the Work Plans will achieve the Performance Standards.

16. Settling Defendants shall, prior to any off-site shipment of Waste Material generated as a consequence of the Work to an out-of-state waste management facility, provide written notification to the appropriate state environmental official in the receiving facility's state and to the EPA Project Coordinator of such shipment of Waste Material. However, this notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

a. The Settling Defendants shall include in the written notification the following information, where available: (1) the name and location of the facility to which the Waste Material are to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. The Settling Defendants shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

b. The identity of the receiving facility and state will be determined by the Settling Defendants following the award of the contract for Remedial Action construction. The Settling Defendants shall provide the information required by Paragraph 16.a as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

VII. REMEDY REVIEW

17. Periodic Review. Settling Defendants shall conduct any studies and investigations as requested by EPA, in order to permit EPA to conduct reviews of whether the Remedial Action is protective of human health and the environment at least every five years as required by Section 121(c) of CERCLA and any applicable regulations.

18. EPA Selection of Further Response Actions. If EPA determines, at any time, that the Remedial Action is not protective of human health and the environment, EPA may select further response actions for the Site in accordance with the requirements of CERCLA and the NCP.

19. Opportunity To Comment. Settling Defendants and, if required by Sections 113(k)(2) or 117 of CERCLA, the public, will be provided with an opportunity to comment on any further response actions proposed by EPA as a result of the review conducted pursuant to Section 121(c) of CERCLA and to submit written comments for the record during the comment period.

20. Settling Defendants' Obligation To Perform Further Response Actions. If EPA selects further response actions for the Site, the Settling Defendants shall undertake such further response actions to the extent that the reopener conditions in Paragraph 84 or Paragraph 85 (United States' reservations of liability based on unknown conditions or new information) are satisfied. Settling Defendants may invoke the procedures set forth in Section XIX (Dispute Resolution) to dispute (1) EPA's determination that the reopener conditions of Paragraph 84 or Paragraph 85 of Section XXI (Covenants Not To Sue by Plaintiffs) are satisfied, (2) EPA's determination that the Remedial Action is not protective of human health and the environment, or (3) EPA's selection of the further response actions. Disputes pertaining to whether the Remedial Action is protective or to EPA's selection of further response actions shall be resolved pursuant to Paragraph 68 (record review).

21. Submissions of Plans. If Settling Defendants are required to perform the further response actions pursuant to Paragraph 20, they shall submit a plan for such work to EPA for approval in accordance with the procedures set forth in Section VI (Performance of the Work by Settling Defendants) and shall implement the plan approved by EPA in accordance with the provisions of this Decree.

VIII. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS

22. Settling Defendants shall use quality assurance, quality control, and chain of custody procedures for all treatability, design and monitoring samples in accordance with "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operation," (EPA QA/R5; "Preparing Perfect Project Plans," (EPA /600/9-88/087), and subsequent amendments to such guidelines upon notification by EPA to Settling Defendants of such amendment. Amended guidelines shall apply only to procedures conducted after such notification. Prior to the commencement of any monitoring project under this Consent Decree, Settling Defendants shall submit to EPA for approval, a Quality Assurance Project Plan ("QAPP") that is consistent

with the SOW, the NCP and applicable guidance documents. If relevant to the proceeding, the Parties agree that validated sampling data generated in accordance with the QAPP(s) and reviewed and approved by EPA shall be admissible as evidence, without objection, in any proceeding under this Decree. Settling Defendants shall ensure that EPA and State personnel and their authorized representatives are allowed access at reasonable times to all laboratories utilized by Settling Defendants in implementing this Consent Decree. In addition, Settling Defendants shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring. Settling Defendants shall ensure that the laboratories they utilize for the analysis of samples taken pursuant to this Decree perform all analyses according to accepted EPA methods. Accepted EPA methods consist of those methods which are documented in the "Contract Lab Program Statement of Work for Inorganic Analysis" and the "Contract Lab Program Statement of Work for Organic Analysis," dated February 1988, and any amendments made thereto during the course of the implementation of this Decree, or other EPA approved methods. If a proposed laboratory does not participate in the Contract Laboratory Program ("CLP") for the analyses required, performance evaluation samples must be analyzed to demonstrate the capability to conduct the required analyses prior to being approved for use. Once a non-CLP laboratory has been selected, the laboratory shall submit a copy of the laboratory Quality Assurance Program Plan to EPA for review and approval. Settling Defendants shall ensure that all laboratories they use for analysis of samples taken pursuant to this Consent Decree participate in an EPA or EPA-equivalent QA/QC program. Settling Defendants shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Decree will be conducted in accordance with the procedures set forth in the QAPP approved by EPA.

23. Upon request, the Settling Defendants shall allow split or duplicate samples to be taken by EPA, or the State, or their authorized representatives. Settling Defendants shall notify EPA not less than 28 days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow the Settling Defendants to take split or duplicate samples of any samples they take as part of the Plaintiffs' oversight of the Settling Defendants' implementation of the Work.

24. When requested by EPA, Settling Defendants shall submit to EPA copies of the results of all sampling and/or tests or other data obtained or generated by or on behalf of Settling Defendants with respect to the Site and/or the implementation of this Consent Decree, within thirty (30) days unless EPA agrees otherwise.

25. Notwithstanding any provision of this Consent Decree, the United States hereby retains all of their information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA and any other applicable statutes or regulations.

IX. ACCESS AND INSTITUTIONAL CONTROLS

26. If the Site, or any other property where access and/or land/water use restrictions are needed to implement this Consent Decree, is owned or controlled by any of the Settling Defendants, such Settling Defendants shall:

a. commencing on the date of lodging of this Consent Decree, provide the United States, and their representatives, including EPA, the State and its contractors, with access

at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Consent Decree including, but not limited to, the following activities:

- (1) Monitoring the Work;
- (2) Verifying any data or information submitted to the United States (or the State);
- (3) Conducting investigations relating to contamination at or near the Site;
- (4) Obtaining samples;
- (5) Assessing the need for planning, or implementing additional response actions at or near the Site;
- (6) Implementing the Work pursuant to the conditions set forth in Paragraph 88 of this Consent Decree;
- (7) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Settling Defendants or their agents, consistent with Section XXIV (Access to Information);
- (8) Assessing Settling Defendants' compliance with this Consent Decree; and
- (9) Determining whether the Site or other property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted, by or pursuant to this Consent Decree;

b. commencing on the date of lodging of this Consent Decree, refrain from using the Site, or such other property, in any manner that would interfere with or adversely affect the integrity or protectiveness of the remedial measures to be implemented pursuant to this Consent Decree;

c. if EPA so requests, execute and record in the Ocean County Clerk's Office located on Washington Street, Toms River, New Jersey an easement, running with the land, that (i) grants a right of access for the purpose of conducting any activity related to this Consent Decree including, but not limited to, those activities listed in Paragraph 26.a of this Consent Decree, and (ii) grants the right to enforce the land/water use restrictions described in Paragraph 26.b of this Consent Decree, or other restrictions that EPA determines are necessary to implement, ensure non-interference with, or ensure the protectiveness of the remedial measures to be performed pursuant to this Consent Decree. Such Settling Defendants shall grant the access rights and the rights to enforce the land/water use restrictions to (i) the United States, on behalf of EPA, and its representatives, (ii) the State and its representatives, (iii) the other Settling Defendants, if any, and their representatives, and/or (iv) other appropriate grantees. Such Settling Defendants shall, within 45 days of any such request by EPA, submit to EPA for review and approval with respect to such property:

- (1) A draft easement, in substantially the form attached hereto as Appendix D, that is enforceable under the laws of the State of New Jersey, free and clear of all prior liens and encumbrances (except as approved by EPA), and acceptable under the Attorney General's Title Regulations promulgated pursuant to 40 U.S.C. § 255; and

(2) a current title commitment or report prepared in accordance with the U.S. Department of Justice Standards for the Preparation of Title Evidence in Land Acquisitions by the United States (1970) (the "Standards").

Within 15 days of EPA's approval and acceptance of the easement, such Settling Defendants shall update the title search and, if it is determined that nothing has occurred since the effective date of the commitment or report to affect the title adversely, record the easement with the Ocean County Clerk's Office located on Washington Street, Toms River, New Jersey or Registry of Deeds or other appropriate office of Ocean County. Within 30 days of recording the easement, such Settling Defendants shall provide EPA with final title evidence acceptable under the Standards, and a certified copy of the original recorded easement showing the clerk's recording stamps.

27. If the Site, or any other property where access and/or land/water use restrictions are needed to implement this Consent Decree, is owned or controlled by persons other than any of the Settling Defendants, Settling Defendants shall use best efforts to secure from such persons:

a. an agreement to provide access thereto for Settling Defendants, as well as for the United States on behalf of EPA, and the State, as well as their representatives (including contractors), for the purpose of conducting any activity related to this Consent Decree including, but not limited to, those activities listed in Paragraph 26.a of this Consent Decree; and,

b. an agreement, enforceable by the Settling Defendants and the United States, to abide by the obligations and restrictions established by Paragraph 26.b of this Consent Decree, or that are otherwise necessary to implement, ensure non-interference with, or ensure the protectiveness of the remedial measures to be performed pursuant to this Consent Decree.

28. For purposes of Paragraph 27 of this Consent Decree, "best efforts" includes the payment of reasonable sums of money in consideration of access. If any access agreements required by Paragraphs 27.a or 27.b of this Consent Decree are not obtained within 45 days of the Settling Defendants identifying to EPA the need to obtain such access or use restriction agreements, Settling Defendants shall promptly notify the United States in writing, and shall include in that notification a summary of the steps that Settling Defendants have taken to attempt to comply with Paragraph 27 of this Consent Decree. The United States may, as it deems appropriate, assist Settling Defendants in obtaining access or land/water use restrictions, in the form of contractual agreements. Settling Defendants shall reimburse the United States in accordance with the procedures in Section XVI (Payment for Response Costs), for all costs incurred, direct or indirect, by the United States in obtaining such access and/or land/water use restrictions including, but not limited to, the cost of attorney time and the amount of monetary consideration paid or just compensation.

29. If EPA determines that land/water use restrictions in the form of state or local laws, regulations, ordinances or other governmental controls are needed to implement the remedy selected in the ROD, ensure the integrity and protectiveness thereof, or ensure non-interference therewith, Settling Defendants shall cooperate with EPA's and the State's efforts to secure such governmental controls.

30. Notwithstanding any provision of this Consent Decree, the United States and the State retain all of their access authorities and rights, as well as all of their rights to require

land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA and any other applicable statute or regulations.

X. REPORTING REQUIREMENTS

31. In addition to any other requirement of this Consent Decree, Settling Defendants shall submit to EPA and the State written periodic progress reports each month or other reporting period specified by EPA, that: (a) describe the actions which have been taken toward achieving compliance with this Consent Decree during the previous reporting period; (b) include a summary of all results of sampling and tests and all other data received or generated by Settling Defendants or their contractors or agents in the previous reporting period; (c) identify all work plans, plans and other deliverables required by this Consent Decree completed and submitted during the previous reporting period; (d) describe all actions, including, but not limited to, data collection and implementation of work plans, which are scheduled for the next one and one-half reporting periods and provide other information relating to the progress of construction, including, but not limited to, critical path diagrams, Gantt charts and Pert charts; (e) include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of the Work, and a description of efforts made to mitigate those delays or anticipated delays; (f) include any modifications to the work plans or other schedules that Settling Defendants have proposed to EPA or that have been approved by EPA; and (g) describe all activities undertaken in support of the Community Relations Plan during the previous reporting period and those to be undertaken in the next one and one-half reporting periods. Settling Defendants shall submit these progress reports to EPA and the State by the tenth day of every reporting period following the lodging of this Consent Decree until EPA notifies the Settling Defendants pursuant to Paragraph 51.b of Section XIV (Certification of Completion). If requested by EPA, Settling Defendants shall also provide briefings for EPA to discuss the progress of the Work.

32. The Settling Defendants shall notify EPA of any change in the schedule described in the periodic progress report for the performance of any activity, including, but not limited to, data collection and implementation of work plans, no later than fourteen (14) days prior to the performance of the activity, or on such other notice as the EPA may direct.

33. Upon the occurrence of any event during performance of the Work that Settling Defendants are required to report pursuant to Section 103 of CERCLA or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), Settling Defendants shall within 24 hours of the onset of such event orally notify the EPA Project Coordinator or the Alternate EPA Project Coordinator (in the event of the unavailability of the EPA Project Coordinator), or, in the event that neither the EPA Project Coordinator or Alternate EPA Project Coordinator is available, the Special Projects Branch Chief, Region II, United States Environmental Protection Agency. These reporting requirements are in addition to the reporting required by CERCLA Section 103 or EPCRA Section 304.

34. Within 20 days of the onset of such an event, Settling Defendants shall furnish to Plaintiff a written report, signed by the Settling Defendants' Project Coordinator, setting forth the events which occurred and the measures taken, and to be taken, in response thereto. Within 30 days of the conclusion of such an event, Settling Defendants shall submit a report setting forth all actions taken in response thereto.

35. Settling Defendants shall submit copies of all plans, reports, and data required by the SOW, the Remedial Design Work Plan, the Remedial Action Work Plan, or any other approved plans to EPA and the State in accordance with the schedules set forth in such plans.

36. All reports and other documents submitted by Settling Defendants to EPA other than the periodic progress reports referred to above which purport to document Settling Defendants' compliance with the terms of this Consent Decree shall be signed by an authorized representative of the Settling Defendants.

XI. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

37. After review of any plan, report or other item which is required to be submitted for approval pursuant to this Consent Decree, EPA, shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that the Settling Defendants modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Settling Defendants at least one notice of deficiency and an opportunity to cure within 21 days, or a longer time as specified by EPA's Project Coordinator, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects and the deficiencies in the submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

38. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 37(a), (b), or (c), Settling Defendants shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA subject only to their right to invoke the Dispute Resolution procedures set forth in Section XIX (Dispute Resolution) with respect to the modifications or conditions made by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Paragraph 37(c) and the submission has a material defect, EPA retains its right to seek stipulated penalties, as provided in Section XX (Stipulated Penalties).

39. Resubmission of Plans.

a. Upon receipt of a notice of disapproval pursuant to Paragraph 37(d), Settling Defendants shall, within 21 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other item for approval. Any stipulated penalties applicable to the submission, as provided in Section XX, shall accrue during the 21 day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 40 and 41.

b. Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 37(d), Settling Defendants shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission. Implementation of any non-deficient portion of a submission shall not relieve Settling Defendants of any liability for stipulated penalties under Section XX (Stipulated Penalties).

40. In the event that a resubmitted plan, report or other item, or portion thereof, is disapproved by EPA, EPA may again require the Settling Defendants to correct the deficiencies, in accordance with the preceding Paragraphs. EPA also retains the right to modify or develop the plan, report or other item. Settling Defendants shall implement any such plan, report, or item

as modified or developed by EPA, subject only to their right to invoke the procedures set forth in Section XIX (Dispute Resolution).

41. If upon resubmission, a plan, report, or item is disapproved or modified by EPA due to a material defect, Settling Defendants shall be deemed to have failed to submit such plan, report, or item timely and adequately unless the Settling Defendants invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution) and EPA's action is overturned pursuant to that Section. The provisions of Section XIX (Dispute Resolution) and Section XX (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is upheld, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XX.

42. All plans, reports, and other items required to be submitted to EPA under this Consent Decree shall, upon approval or modification by EPA, be enforceable under this Consent Decree. In the event EPA approves or modifies a portion of a plan, report, or other item required to be submitted to EPA under this Consent Decree, the approved or modified portion shall be enforceable under this Consent Decree.

XII. PROJECT COORDINATORS

43. For the purposes of this Consent Decree, the following persons shall be the Project Coordinator/Alternate Coordinators for the Settling Defendants and EPA;

Settling Defendants Project Coordinator: David Williams, Technical Director, Ciba Specialty Chemicals Corporation North America, Oak Ridge Parkway, P.O. Box 71, Toms River, New Jersey 08754-0071.

EPA Project Coordinator: Romona Pezzella, Remedial Project Manager, U.S. Environmental Protection Agency, Emergency and Remedial Response Division, 290 Broadway, New York, NY 10007-1866.

EPA Alternate Project Coordinator: Don Lynch, Team Leader, U.S. Environmental Protection Agency, Emergency and Remedial Response Division, 290 Broadway, New York, NY 10007-1866.

Within 14 days of lodging this Consent Decree, Settling Defendants shall notify EPA, in writing, of the name, address and telephone number of their designated Alternate Project Coordinator. If a Project Coordinator or Alternate Project Coordinator initially designated is changed, the identity of the successor will be given to the other Parties at least 5 working days before the changes occur, unless impracticable, but in no event later than the actual day the change is made. The Settling Defendants' Project Coordinator or Alternate Coordinator shall be subject to disapproval by EPA and shall have the technical expertise sufficient to adequately oversee all aspects of the Work. The Settling Defendants' Project Coordinator shall not be an attorney for any of the Settling Defendants in this matter. He or she may assign other representatives, including other contractors, to serve as a Site representative for oversight of performance of daily operations during remedial activities.

44. Plaintiff may designate other representatives, including, but not limited to, EPA or State employees, and federal contractors and consultants, to observe and monitor the progress of any activity undertaken pursuant to this Consent Decree. EPA's Project Coordinator and Alternate Project Coordinator shall have the authority lawfully vested in a Remedial Project

Manager (RPM) and an On-Scene Coordinator (OSC) by the National Contingency Plan, 40 C.F.R. Part 300. In addition, EPA's Project Coordinator or Alternate Project Coordinator shall have authority, consistent with the National Contingency Plan, to halt any Work required by this Consent Decree and to take any necessary response action when s/he determines that conditions at the Site constitute an emergency situation or may present an immediate threat to public health or welfare or the environment due to release or threatened release of Waste Material.

45. EPA's Project Coordinator and the Settling Defendants' Project Coordinator should endeavor to meet in person or by telephone on a monthly basis.

XIII. ASSURANCE OF ABILITY TO COMPLETE WORK

46. Within 30 days of entry of this Consent Decree, Settling Defendants shall establish and maintain financial security in the amount of \$91,400,000 in one or more of the following forms:

- a. A surety bond guaranteeing performance of the Work;
- b. One or more irrevocable letters of credit equaling the total estimated cost of the Work;
- c. A trust fund;
- d. A guarantee to perform the Work by one or more parent corporations or subsidiaries, or by one or more unrelated corporations that have a substantial business relationship with at least one of the Settling Defendants; or,
- e. A demonstration that the Settling Defendants satisfy the requirements of 40 C.F.R. Part 264.143(f) provided, however, that if EPA approves the assumption of the obligations of this Consent Decree by a new entity and that entity has not yet issued any bond, EPA shall accept an interim or "shadow" bond rating from a bond rating agency listed in the referenced regulations so long as the new entity otherwise meets the requirements of 40 C.F.R. Part 264.143(f) for the first year after such assumption of the obligations.

47. If the Settling Defendants seek to demonstrate the ability to complete the Work through a guarantee by a third party pursuant to Paragraph 46.d of this Consent Decree, Settling Defendants shall demonstrate that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f) or Paragraph 46e. If Settling Defendants seek to demonstrate their ability to complete the Work by means of the financial test or the corporate guarantee pursuant to Paragraph 46.d or 46.e, they shall resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) or pursuant to Paragraph 46e annually, by March 31 of each succeeding calendar year. In the event that EPA, determines at any time that the financial assurances provided pursuant to this Section are inadequate, Settling Defendants shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 46 of this Consent Decree. Settling Defendants' inability to demonstrate financial ability to complete the Work shall not excuse performance of any activities required under this Consent Decree.

48. If Settling Defendants can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 46 above after entry of this Consent Decree, Settling Defendants may, on any anniversary date of entry of this Consent Decree, or at any other time agreed to by the Parties, reduce the amount of the financial security

provided under this Section to the estimated cost of the remaining work to be performed. Settling Defendants shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security upon approval by EPA. In the event of a dispute, Settling Defendants may reduce the amount of the security in accordance with the final administrative or judicial decision resolving the dispute.

49. Settling Defendants may change the form of financial assurance provided under this Section at any time, upon notice to and approval by EPA, provided that the new form of assurance meets the requirements of this Section. In the event of a dispute, Settling Defendants may change the form of the financial assurance only in accordance with the final administrative or judicial decision resolving the dispute.

XIV. CERTIFICATION OF COMPLETION

50. Completion of the Remedial Action.

a. Within 60 days after Settling Defendants conclude that the Remedial Action has been fully performed and the Performance Standards have been attained, Settling Defendants shall schedule and conduct a pre-certification inspection consistent with the terms of the attached SOW, to be attended by Settling Defendant and EPA. If, after the pre-certification inspection, the Settling Defendants still believe that the Remedial Action has been fully performed and the Performance Standards have been attained, they shall submit a Draft Remedial Action Report to EPA and the State requesting certification to EPA for approval, pursuant to Section XI (EPA Approval of Plans and Other Submissions) within 30 days of the inspection. In the report, a registered professional engineer and the Settling Defendants' Project Coordinator shall state that the Remedial Action has been completed in full satisfaction of the requirements of this Consent Decree. The written report shall include as-built drawings signed and stamped by a professional engineer. The report shall contain the following statement, signed by a responsible corporate official of a Settling Defendant or the Settling Defendants' Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If, after completion of the pre-certification inspection and receipt and review of the Draft Remedial Action Report, EPA determines that the Remedial Action or any portion thereof has not been completed in accordance with this Consent Decree or that the Performance Standards have not been achieved, EPA will notify Settling Defendants in writing of the activities that must be undertaken by Settling Defendants pursuant to this Consent Decree to complete the Remedial Action and achieve the Performance Standards. Provided, however, that EPA may only require Settling Defendants to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the "scope of the remedy selected in the ROD," as that term is defined in Paragraph 14.b. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the SOW or require the Settling Defendants to submit a schedule to EPA for approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Settling Defendants shall perform all activities described in the notice in accordance with the specifications and schedules established pursuant to this Paragraph, subject

to their right to invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution).

b. If EPA concludes, based on the initial or any subsequent report requesting Certification of Completion that the Remedial Action has been performed in accordance with this Consent Decree and that the Performance Standards have been achieved, EPA will so certify in writing to Settling Defendants. This certification shall constitute the Certification of Completion of the Remedial Action for purposes of this Consent Decree, including, but not limited to, Section XXI (Covenants Not to Sue by Plaintiffs). Certification of Completion of the Remedial Action shall not affect Settling Defendants' obligations under this Consent Decree.

51. Completion of the Work.

a. Within 60 days after Settling Defendants conclude that all phases of the Work, have been fully performed, including long-term monitoring and maintenance, Settling Defendants shall schedule and conduct a pre-certification inspection consistent with the terms of the attached SOW, to be attended by Settling Defendants and EPA. If, after the pre-certification inspection, the Settling Defendants still believe that the Work has been fully performed, Settling Defendants shall submit a written report to EPA and the State by a registered professional engineer stating that the Work has been completed in full satisfaction of the requirements of this Consent Decree. The report shall contain the following statement, signed by a responsible corporate official of a Settling Defendant or the Settling Defendants' Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If, after review of the written report, EPA determines that any portion of the Work has not been completed in accordance with this Consent Decree, EPA will notify Settling Defendants in writing of the activities that must be undertaken by Settling Defendants pursuant to this Consent Decree to complete the Work. Provided, however, that EPA may only require Settling Defendants to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the "scope of the remedy selected in the ROD," as that term is defined in Paragraph 14.b. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the SOW or require the Settling Defendants to submit a schedule to EPA for approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Settling Defendants shall perform all activities described in the notice in accordance with the specifications and schedules established therein, subject to their right to invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution).

b. If EPA concludes, based on the initial or any subsequent request for Certification of Completion by Settling Defendants, that the Work has been performed in accordance with this Consent Decree, EPA will so notify the Settling Defendants in writing.

XV. EMERGENCY RESPONSE

52. In the event of any action or occurrence during the performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the

environment, Settling Defendants shall, subject to Paragraph 53, immediately take all appropriate action to prevent, abate, or minimize such release or threat of release, and shall immediately notify, the EPA's Project Coordinator, or, if the Project Coordinator is unavailable, EPA's Alternate Project Coordinator. If neither of these persons is available, the Settling Defendants shall notify, during business hours, the Chief, Response & Prevention Branch, Region 2 at (732) 321-6656. Settling Defendants shall also immediately notify the NJDEP Emergency Hotline, (609) 292-7172. Settling Defendants shall take such actions in consultation with EPA's Project Coordinator or other available authorized EPA officer and in accordance with all applicable provisions of the Health and Safety Contingency Plans, and any other applicable plans or documents developed pursuant to the SOW. In the event that Settling Defendants fail to take appropriate response action as required by this Section, and EPA, as appropriate, takes such action instead, Settling Defendants shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XVI (Payment for Response Costs).

53. Nothing in the preceding Paragraph or in this Consent Decree shall be deemed to limit any authority of the United States: a) to take all appropriate action to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, or b) to direct or order such action, or seek an order from the Court, to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, subject to Section XXI (Covenants Not to Sue by Plaintiffs).

XVI. PAYMENTS FOR RESPONSE COSTS

54. Payments for Past Response Costs.

a.. Within 30 days of the Effective Date, Settling Defendants shall pay to EPA \$250,000 in full satisfaction of Past Response Costs. Payment shall be made by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice account in accordance with current EFT procedures, referencing USAO File Number ____, EPA Site/Spill ID Number 0287, and DOJ Case Number 90-11-2-289/1. Payment shall be made in accordance with instructions provided to the Settling Defendants by the Financial Litigation Unit of the United States Attorney's Office for the District of New Jersey following lodging of the Consent Decree. Any payments received by the Department of Justice after 4:00 p.m. (Eastern Time) will be credited on the next business day.

b. At the time of payment, Settling Defendants shall send notice that payment has been made to the United States, to EPA and to the Regional Financial Management Officer, in accordance with Section XXVI (Notices and Submissions). The total amount to be paid by Settling Defendants pursuant to subparagraph "a" shall be deposited in the EPA Hazardous Substance Superfund.

55. Payments for Future Response Costs.

Settling Defendants shall pay to EPA all Future Response Costs not inconsistent with the National Contingency Plan. On a periodic basis the United States will send Settling Defendants a bill requiring payment that includes a SCORPIOS printout of cost data from EPA's financial management system, and, if appropriate, a summary of costs incurred by the United States Department of Justice. The Settling Defendants shall make all payments required by this Paragraph by FedWire EFT. To effect the payment via EFT, Settling Defendant shall provide the following information to its bank:

- i. Amount of Payment:
- ii. Title of Mellon Bank Account to receive the payment: **EPA**
- iii. Account code for Mellon Bank receiving the payment: **9108544**
- iv. Mellon Bank ABA Routing Number: **043000261**
- v. Name of remitter:
- vi. Case number:
- vii. Site/Spill Identifier: **02-87**

Along with this information, Settling Defendant shall instruct its bank to remit payment in the agreed amount via EFT to EPA's account with Mellon Bank.

To ensure that payment is properly recorded, Settling Defendant shall send a letter, within one week of the EFT, which references the date of the EFT, the payment amount, the name of the site, the case number, and your name and address to the United States, to EPA and to the Regional Financial Management Officer, in accordance with Section XXVI (Notices and Submissions).

56. Settling Defendants may contest payment of any Future Response Costs under Paragraph 55 if they determine that the United States has made an accounting error or if they allege that a cost item that is included represents costs that are inconsistent with the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the United States (if the United States' accounting is being disputed) pursuant to Section XXVI (Notices and Submissions). Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, the Settling Defendants shall within the 30 day period pay all uncontested Future Response Costs to the United States in the manner described in Paragraph 55. Simultaneously, the Settling Defendants shall establish an interest-bearing escrow account in a federally-insured bank doing business in the State of New Jersey and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. The Settling Defendants shall send to the United States, as provided in Section XXVI (Notices and Submissions), a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, the Settling Defendants shall initiate the Dispute Resolution procedures in Section XIX (Dispute Resolution). If the United States prevails in the dispute, within 5 days of the resolution of the dispute, the Settling Defendants shall pay the sums due (with accrued interest) to the United States, in the manner described in Paragraph 55. If the Settling Defendants prevail concerning any aspect of the contested costs, the Settling Defendants shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to the United States in the manner described in Paragraph 55; Settling Defendants shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XIX (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding the Settling Defendants' obligation to reimburse the United States for its Future Response Costs.

57. In the event that the payments required by Paragraph 55 are not made within 30 days of the Settling Defendants' receipt of the bill, Settling Defendants shall pay Interest on the unpaid balance. The Interest to be paid on Past Response Costs under this Paragraph shall begin to accrue 30 days after the Effective Date. The Interest on Future Response Costs shall begin to accrue on the date of the bill. The Interest shall accrue through the date of the Settling Defendant's payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to Plaintiffs by virtue of Settling Defendants' failure to make timely payments under this Section. The Settling Defendants shall make all payments required by this Paragraph in the manner described in Paragraph 55.

XVII. INDEMNIFICATION AND INSURANCE

58. Settling Defendant's Indemnification of the United States.

a. The United States does not assume any liability by entering into this agreement or by virtue of any designation of Settling Defendants as EPA's authorized representatives under Section 104(e) of CERCLA. Settling Defendants shall indemnify, save and hold harmless the United States, and their officials, agents, employees, contractors, subcontractors, or representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Settling Defendants, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Consent Decree, including, but not limited to, any claims arising from any designation of Settling Defendants as EPA's authorized representatives under Section 104(e) of CERCLA. Further, the Settling Defendants agree to pay the United States all costs they incur including, but not limited to, attorneys fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Settling Defendants, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Consent Decree. The United States shall not be held out as a party to any contract entered into by or on behalf of Settling Defendants in carrying out activities pursuant to this Consent Decree. Neither the Settling Defendants nor any such contractor shall be considered an agent of the United States.

b. The United States shall give Settling Defendants notice of any claim for which the United States plans to seek indemnification pursuant to Paragraph 58, and shall consult with Settling Defendants prior to settling such claim.

59. Settling Defendants waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Settling Defendants and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Settling Defendants shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Settling Defendants and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

60. No later than 15 days before commencing any on-site Work, Settling Defendants shall secure, and shall maintain until the first anniversary of EPA's Certification of Completion of the Remedial Action pursuant to Subparagraph 50.b of Section XIV (Certification of Completion) comprehensive general liability insurance with limits of three million dollars, combined single limit, and automobile liability insurance with limits of one million dollars, combined single limit, naming the United States as an additional insured. In addition, for the duration of this Consent Decree, Settling Defendants shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Settling Defendants in furtherance of this Consent Decree. Prior to commencement of the Work under this Consent Decree, Settling Defendants shall provide to EPA certificates of such insurance and a copy of each insurance policy. Settling Defendants shall resubmit such certificates and copies of policies each year on the anniversary of the Effective Date. If Settling Defendants demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then, with respect to that contractor or subcontractor, Settling Defendants need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

XVIII. FORCE MAJEURE

61. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of the Settling Defendants, of any entity controlled by Settling Defendants, or of Settling Defendants' contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Settling Defendants' best efforts to fulfill the obligation. The requirement that the Settling Defendants exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (1) as it is occurring and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent possible. "Force Majeure" does not include financial inability to complete the Work or a failure to attain the Performance Standards.

62. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, the Settling Defendants shall notify orally EPA's Project Coordinator or, in his or her absence, EPA's Alternate Project Coordinator or, in the event both of EPA's designated representatives are unavailable, the Special Projects Branch Chief, EPA Region II, within four days of when Settling Defendants first knew that the event might cause a delay. Within five days thereafter, Settling Defendants shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; the Settling Defendants' rationale for attributing such delay to a force majeure event if they intend to assert such a claim; and a statement as to whether, in the opinion of the Settling Defendants, such event may cause or contribute to an endangerment to public health, welfare or the environment. The Settling Defendants shall include with any notice all available documentation supporting their claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Settling Defendants from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Settling Defendants shall be

deemed to know of any circumstance of which Settling Defendants, any entity controlled by Settling Defendants, or Settling Defendants' contractors knew or should have known.

63. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify the Settling Defendants in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify the Settling Defendants in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

64. If the Settling Defendants elect to invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution), they shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, Settling Defendants shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Settling Defendants complied with the requirements of Paragraphs 61 and 62, above. If Settling Defendants carry this burden, the delay at issue shall be deemed not to be a violation by Settling Defendants of the affected obligation of this Consent Decree identified to EPA and the Court.

XIX. DISPUTE RESOLUTION

65. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. However, the procedures set forth in this Section shall not apply to actions by the United States to enforce obligations of the Settling Defendants that have not been disputed in accordance with this Section.

66. Any dispute which arises under or with respect to this Consent Decree shall in the first instance be the subject of informal negotiations between the parties to the dispute. The period for informal negotiations shall not exceed 20 days from the time the dispute arises, unless it is modified by written agreement of the parties to the dispute. The dispute shall be considered to have arisen when one party sends the other parties a written Notice of Dispute.

67. Statements of Position.

a. In the event that the parties cannot resolve a dispute by informal negotiations under the preceding Paragraph, then the position advanced by EPA shall be considered binding unless, within 10 days after the conclusion of the informal negotiation period, Settling Defendants invoke the formal dispute resolution procedures of this Section by serving on the United States a written Statement of Position on the matter in dispute, including, but not limited to, any factual data, analysis or opinion supporting that position and any supporting documentation relied upon by the Settling Defendants. The Statement of Position shall specify the Settling Defendants' position as to whether formal dispute resolution should proceed under Paragraph 68 or Paragraph 69.

b. Within 14 days after receipt of Settling Defendants' Statement of Position, EPA will serve on Settling Defendants its Statement of Position, including, but not limited to, any factual data, analysis, or opinion supporting that position and all supporting documentation relied upon by EPA. EPA's Statement of Position shall include a statement as to whether formal dispute resolution should proceed under Paragraph 68 or 69. Within 14 days after receipt of EPA's Statement of Position, Settling Defendants may submit a Reply.

c. If there is disagreement between EPA and the Settling Defendants as to whether dispute resolution should proceed under Paragraph 68 or 69, the parties to the dispute shall follow the procedures set forth in the paragraph determined by EPA to be applicable. However, if the Settling Defendants ultimately appeal to the Court to resolve the dispute, the Court shall determine which paragraph is applicable in accordance with the standards of applicability set forth in Paragraphs 68 and 69.

68. Formal dispute resolution for disputes pertaining to the selection or adequacy of any response action and all other disputes that are accorded review on the administrative record under applicable principles of administrative law shall be conducted pursuant to the procedures set forth in this Paragraph. For purposes of this Paragraph, the adequacy of any response action includes, without limitation: (1) the adequacy or appropriateness of plans, procedures to implement plans, or any other items requiring approval by EPA under this Consent Decree; and (2) the adequacy of the performance of response actions taken pursuant to this Consent Decree. Nothing in this Consent Decree shall be construed to allow any dispute by Settling Defendants regarding the validity of the ROD's provisions.

a. An administrative record of the dispute shall be maintained by EPA and shall contain all statements of position, including supporting documentation, submitted pursuant to this Section. Where appropriate, EPA may allow submission of supplemental statements of position by the parties to the dispute.

b. The Director of the Emergency and Remedial Response Division, EPA Region II, will issue a final administrative decision resolving the dispute based on the administrative record described in Paragraph 68.a. This decision shall be binding upon the Settling Defendants, subject only to the right to seek judicial review pursuant to Paragraph 68.c and d.

c. Any administrative decision made by EPA pursuant to Paragraph 68.b. shall be reviewable by this Court, provided that a motion for judicial review of the decision is filed by the Settling Defendants with the Court and served on all Parties within 10 days of receipt of EPA's decision. The motion shall include a description of the matter in dispute, the efforts made by the parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of this Consent Decree. The United States may file a response to Settling Defendants' motion.

d. In proceedings on any dispute governed by this Paragraph, Settling Defendants shall have the burden of demonstrating that the decision of the Director of the Emergency and Remedial Response Division, EPA Region II, is arbitrary and capricious or otherwise not in accordance with law. Judicial review of EPA's decision shall be on the administrative record compiled pursuant to Paragraph 68.a.

69. Formal dispute resolution for disputes that neither pertain to the selection or adequacy of any response action nor are otherwise accorded review on the administrative record under applicable principles of administrative law, shall be governed by this Paragraph.

a. Following receipt of Settling Defendants' Statement of Position submitted pursuant to Paragraph 67, the Director of the Emergency and Remedial response Division, EPA Region II, will issue a final decision resolving the dispute. The Emergency and Remedial Response Director's decision shall be binding on the Settling Defendants unless, within 10 days of receipt of the decision, the Settling Defendants file with the Court and serve on the parties a motion for judicial review of the decision setting forth the matter in dispute, the efforts made by the Parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of the Consent Decree. The United States may file a response to Settling Defendants' motion.

b. Notwithstanding Paragraph L of Section I (Background) of this Consent Decree, judicial review of any dispute governed by this Paragraph shall be governed by applicable principles of law.

70. The invocation of formal dispute resolution procedures under this Section shall not extend, postpone or affect in any way any obligation of the Settling Defendants under this Consent Decree, not directly in dispute, unless EPA or the Court agrees otherwise. Stipulated penalties with respect to the disputed matter shall continue to accrue but payment shall be stayed pending resolution of the dispute as provided in Paragraph 79. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Consent Decree. In the event that the Settling Defendants do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XX (Stipulated Penalties).

XX. STIPULATED PENALTIES

71. Settling Defendants shall be liable for stipulated penalties in the amounts set forth in Paragraphs 72 and 73 to the United States for failure to comply with the requirements of this Consent Decree specified below, unless excused under Section XVIII (Force Majeure). "Compliance" by Settling Defendants shall include completion of the activities under this Consent Decree or any work plan or other plan approved under this Consent Decree identified below in accordance with all applicable requirements of law, this Consent Decree, the SOW, and any plans or other documents approved by EPA pursuant to this Consent Decree and within the specified time schedules established by and approved under this Consent Decree.

72. Stipulated Penalty Amounts - Work/Reports

a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Subparagraph 72.b:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 3,000	1st through 14th day
\$ 5,000	15th through 30th day
\$ 7,000	31st day and beyond

b. Compliance Milestones.

- (1) Implementation of the substantive Work Activities required in the submittals listed in (3) through (11), below, and as further described in the Remedial Design Work Plan;
- (2) Implementation of any substantive Work Activities in accordance with any Work Plan submitted by Settling Defendant and approved by EPA pursuant to Section VII of this Consent Decree;
- (3) Deadlines for submission and, if necessary, revision and resubmission of the Remedial Design Work Plan;
- (4) Deadlines for submission and, if necessary, revision and resubmission of the Preliminary (35%) Design Report;
- (5) Deadlines for submission and, if necessary, revision and resubmission of the Intermediate (65%) Design Report;
- (6) Deadlines for submission and, if necessary, revision and resubmission of the Pre-Final (95%) Design Report;
- (7) Deadlines for submission and, if necessary, revision and resubmission of the Final (100%) Design Report;
- (8) Deadlines for submission and, if necessary, revision and resubmission of the Remedial Action Work Plan;
- (9) Deadlines for Remedial Action, as specified in the approved Design Report, including both remediation and monitoring work and Remedial Action Work Plan;
- (10) Deadlines for submission and, if necessary, revision and resubmission of the long-term Monitoring Plan associated with the remediation of the source areas; and,
- (11) Deadlines for submission and, if necessary, revision and resubmission of the Notice of Completion and Final Report for Remedial Action.

73. Stipulated Penalty Amounts - Miscellaneous

a. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports, payments, or other written documents pursuant to any of the following requirements specified in 1 through 5 below:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 1,000	1st through 14th day
\$ 1,500	15th through 30th day
\$ 2,000	31st day and beyond

1. Financial Assurance pursuant to Section XIII of the Consent Decree:
2. Submission of the name of the Project Coordinator to EPA:
3. Reporting Requirements set forth in Section X:

4. Compliance with any requirement of this Consent Decree not otherwise included in 1-11 in Paragraph 72.b., above: and,

5. Requirements for the payment of all costs or interest required by this Consent Decree.

74. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 88 of Section XXI (Covenants Not to Sue by Plaintiff), Settling Defendants shall be liable for a stipulated penalty in the amount of \$7,500,000.

75. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (1) with respect to a deficient submission under Section XI (EPA Approval of Plans and Other Submissions), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Settling Defendants of any deficiency; (2) with respect to a decision by the Director of the Emergency and Remedial Response Division, EPA Region II, under Paragraph 68.b or 69.a of Section XIX (Dispute Resolution), during the period, if any, beginning on the 21st day after the date that Settling Defendants' reply to EPA's Statement of Position is received until the date that the Director issues a final decision regarding such dispute; or (3) with respect to judicial review by this Court of any dispute under Section XIX (Dispute Resolution), during the period, if any, beginning on the 31st day after the Court's receipt of the final submission regarding the dispute until the date that the Court issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Consent Decree. Settling Defendants shall be liable for stipulated penalties relating to optimization of the groundwater extraction and recharge system pursuant to this Consent Decree and not pursuant to the OU 1 Consent Decree.

76. Following EPA's determination that Settling Defendants have failed to comply with a requirement of this Consent Decree, EPA may give Settling Defendants written notification of the same and describe the noncompliance. EPA may send the Settling Defendants a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified the Settling Defendants of a violation.

77. All penalties accruing under this Section shall be due and payable to the United States within 30 days of the Settling Defendants' receipt from EPA of a demand for payment of the penalties, unless Settling Defendants invoke the Dispute Resolution procedures under Section XIX (Dispute Resolution). All payments to the United States under this Section shall be paid as per the terms in paragraph 55, above.

78. The payment of penalties shall not alter in any way Settling Defendants' obligation to complete the performance of the Work required under this Consent Decree.

79. Penalties shall continue to accrue as provided in Paragraph 75 during any dispute resolution period, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to this Court, accrued penalties determined to be owing shall be paid to EPA within 15 days of the agreement or the receipt of EPA's decision or order;

b. If the dispute is appealed to this Court and the United States prevails in whole or in part, Settling Defendants shall pay all accrued penalties determined by the Court to be owed to EPA, within 60 days of receipt of the Court's decision or order, except as provided in Subparagraph c below;

c. If the District Court's decision is appealed by any Party, Settling Defendants shall pay all accrued penalties determined by the District Court to be owing to the United States into an interest-bearing escrow account within 60 days of receipt of the Court's decision or order. Penalties shall be paid into this account as they continue to accrue, at least every 60 days. Within 15 days of receipt of the final appellate court decision, the escrow agent shall pay the balance of the account to EPA or to Settling Defendants to the extent that they prevail.

80. If Settling Defendants fail to pay stipulated penalties when due, the United States may institute proceedings to collect the penalties, as well as interest. Settling Defendants shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 77.

81. Nothing in this Consent Decree shall be construed as prohibiting, altering, or in any way limiting the ability of the United States to seek any other remedies or sanctions available by virtue of Settling Defendants' violation of this Decree or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA. Provided, however, that the United States shall not seek civil penalties pursuant to Section 122(l) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of a willful violation of the Consent Decree.

82. Notwithstanding any other provision of this Section, the United States may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Consent Decree.

XXI. COVENANTS NOT TO SUE BY PLAINTIFF

83. In consideration of the actions that will be performed and the payments that will be made by the Settling Defendants under the terms of the Consent Decree, and except as specifically provided in this Paragraph and Paragraphs 84, 85, 86 and 87 of this Section, the United States covenants not to sue or to take administrative action against Settling Defendants pursuant to Sections 106 and 107(a) of CERCLA and Section 7003 of RCRA relating to the Site. Except with respect to future liability, these covenants not to sue shall take effect upon the receipt by EPA of the payments required by Paragraph 54 of Section XVI (Reimbursement of Response Costs). With respect to future liability, these covenants not to sue shall take effect upon Certification of Completion of Remedial Action by EPA pursuant to Paragraph 50.b of Section XIV (Certification of Completion). These covenants not to sue are conditioned upon the satisfactory performance by Settling Defendants of their obligations under this Consent Decree. These covenants not to sue extend only to the Settling Defendants and do not extend to any other person.

84. United States' Pre-certification Reservations. Notwithstanding any other provision of this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an administrative order seeking to compel Settling Defendants

- a. to perform further response actions relating to the Site or
- b. to reimburse the United States for additional costs of response if, prior to Certification of Completion of the Remedial Action:
 - (1) conditions at the Site, previously unknown to EPA, are discovered,or
 - (2) information, previously unknown to EPA, is received, in whole or in part,

and these previously unknown conditions or information together with any other relevant information indicates that the Remedial Action is not protective of human health or the environment.

85. United States' Post-certification Reservations. Notwithstanding any other provision of this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an administrative order seeking to compel Settling Defendants

- a. to perform further response actions relating to the Site or
- b. to reimburse the United States for additional costs of response if, subsequent to Certification of Completion of the Remedial Action:
 - (1) conditions at the Site, previously unknown to EPA, are discovered,or
 - (2) information, previously unknown to EPA, is received, in whole or in part,

and these previously unknown conditions or this information together with other relevant information indicate that the Remedial Action is not protective of human health or the environment.

86. For purposes of Paragraph 84, the information and the conditions known to EPA shall include only that information and those conditions known to EPA as of the date the ROD was signed and set forth in the Record of Decision for the Site and the administrative record supporting the Record of Decision. For purposes of Paragraph 85, the information and the conditions known to EPA shall include only that information and those conditions known to EPA as of the date of Certification of Completion of the Remedial Action and set forth in the Record of Decision, the administrative record supporting the Record of Decision, the post-ROD administrative record, or in any information received by EPA pursuant to the requirements of this Consent Decree prior to Certification of Completion of the Remedial Action.

87. General reservations of rights. The covenants not to sue set forth above do not pertain to any matters other than those expressly specified in Paragraph 83. The United States reserves, and this Consent Decree is without prejudice to, all rights against Settling Defendants with respect to all other matters, including but not limited to, the following:

- a. claims based on a failure by Settling Defendants to meet a requirement of this Consent Decree;

b. liability arising from the past, present, or future disposal, release, or threat of release of Waste Materials outside of the Site, as well as all rights to require, if EPA so requests, the Settling Defendants to use best efforts, including the payment of reasonable sums of money, to secure easements running with the land (granting rights of access and/or to enforce land/water use restrictions for the purpose of conducting any activity related to this Consent Decree, including but not limited to, those types of easements described in paragraph 26c.) on property owned or controlled by persons other than the Settling Defendants, as provided in Paragraph 26c, should unforeseen events or conditions arise requiring same;

c. liability for future disposal of Waste Material at the Site, other than as provided in the ROD, the Work, or otherwise ordered by EPA;

d. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

e. criminal liability;

f. liability for violations of federal or state law which occur during or after implementation of the Remedial Action;

g. liability, prior to Certification of Completion of the Remedial Action, for additional response actions that EPA determines are necessary to achieve Performance Standards, but that cannot be required pursuant to Paragraph 14 (Modification of the SOW or Related Work Plans);

h. bills currently under dispute, including Bill for Collection #s 02200T084; 02298T085; and 022999T101 issued to Settling Defendants pursuant to previously executed Consent Decree (Civil Action No. 93-4675, entered December 1, 1993), and/or the Administrative Order on Consent (Index No. II-CERCLA-95-005, effective October 18, 1995).

i. liability for additional operable units at the Site or the final response action;

j. liability for costs that the United States will incur related to the Site but are not within the definition of Future Response Costs; and,

k. liability for costs related to the Site incurred by the Agency for Toxic Substances and Disease Registry.

88. Work Takeover. In the event EPA determines that Settling Defendants have ceased implementation of any portion of the Work, are seriously or repeatedly deficient or late in their performance of the Work, or are implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portions of the Work as EPA determines necessary. Settling Defendants may invoke the procedures set forth in Section XIX (Dispute Resolution), Paragraph 68, to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by the United States in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Settling Defendants shall pay pursuant to Section XVI (Payment for Response Costs).

89. Notwithstanding any other provision of this Consent Decree, the United States retains all authority and reserve all rights to take any and all response actions authorized by law.

XXII. COVENANTS BY SETTLING DEFENDANTS

90. Covenant Not to Sue. Subject to the reservations in Paragraph 91, Settling Defendants hereby covenant not to sue and agree not to assert any claims or causes of action against the United States with respect to the Site or this Consent Decree, including, but not limited to:

- a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507) through CERCLA Sections 106(b)(2), 107, 111, 112, 113 or any other provision of law;
- b. any claims against the United States, including any department, agency or instrumentality of the United States under CERCLA Sections 107 or 113 related to the Site, or
- c. any claims arising out of response activities at the Site, including claims based on EPA's selection of response actions, oversight of response activities or approval of plans for such activities.

91. The Settling Defendants reserve, and this Consent Decree is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, any such claim shall not include a claim for any damages caused, in whole or in part, by the act or omission of any person, including any contractor, who is not a federal employee as that term is defined in 28 U.S.C. § 2671; nor shall any such claim include a claim based on EPA's selection of response actions, or the oversight or approval of the Settling Defendants' plans or activities. The foregoing applies only to claims which are brought pursuant to any statute other than CERCLA and for which the waiver of sovereign immunity is found in a statute other than CERCLA.

92. Nothing in this Consent Decree shall be deemed to constitute preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

93. Settling Defendants agree not to assert any claims and to waive all claims or causes of action that they may have for all matters relating to the Site, including for contribution, against any person where the person's liability to Settling Defendants with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if:

- a. the materials contributed by such person to the Site containing hazardous substances did not exceed the greater of (i) 0.002% of the total volume of waste at the Site, or (ii) 110 gallons of liquid materials or 200 pounds of solid materials.
- b. This waiver shall not apply to any claim or cause of action against any person meeting the above criteria if EPA has determined that the materials contributed to the Site by such person contributed or could contribute significantly to the costs of response at the Site. This waiver also shall not apply with respect to any defense, claim, or cause of action that a

Settling Defendant may have against any person if such person asserts a claim or cause of action relating to the Site against such Settling Defendant.

XXIII. EFFECT OF SETTLEMENT: CONTRIBUTION PROTECTION

94. Except as provided in paragraph 93, above, nothing in this Consent Decree shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Consent Decree. The preceding sentence shall not be construed to waive or nullify any rights that any person not a signatory to this decree may have under applicable law. Each of the Parties expressly reserves any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto.

95. The Parties agree, and by entering this Consent Decree this Court finds, that the Settling Defendants are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2), for matters addressed in this Consent Decree.

a. The "matters addressed" in this settlement are the Past and Future Response Costs as defined herein and the Work defined herein. The "matters addressed" in this settlement do not include those response costs or response actions as to which the United States has reserved its rights under this Consent Decree (except for claims for failure to comply with this Decree), in the event that the United States asserts rights against Settling Defendants coming within the scope of such reservations.

96. The Settling Defendants agree that with respect to any suit or claim for contribution brought by them for matters related to this Consent Decree they will notify the United States in writing no later than 60 days prior to the initiation of such suit or claim.

97. The Settling Defendants also agree that with respect to any suit or claim for contribution brought against them for matters related to this Consent Decree they will notify in writing the United States within 10 days of service of the complaint on them. In addition, Settling Defendants shall notify the United States within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a court setting a case for trial.

98. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site, Settling Defendants shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenants not to sue set forth in Section XXI (Covenants Not to Sue by Plaintiff).

XXIV. ACCESS TO INFORMATION

99. Settling Defendants shall provide to EPA, upon request, copies of all documents and information within their possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Consent Decree, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports,

sample traffic routing, correspondence, or other documents or information related to the Work. Settling Defendants shall also make available to EPA, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

100. Business Confidential and Privileged Documents.

a. Settling Defendants may assert business confidentiality claims covering part or all of the documents or information submitted to Plaintiffs under this Consent Decree to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA, or if EPA has notified Settling Defendants that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA, the public may be given access to such documents or information without further notice to Settling Defendants.

b. The Settling Defendants may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Settling Defendants assert such a privilege in lieu of providing documents, they shall provide the Plaintiffs with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the contents of the document, record, or information; and (6) the privilege asserted by Settling Defendants. However, no documents, reports or other information created or generated pursuant to the requirements of the Consent Decree shall be withheld on the grounds that they are privileged.

101. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

XXV. RETENTION OF RECORDS

102. Until 10 years after the Settling Defendant's receipt of EPA's notification pursuant to Paragraph 51.b of Section XIV (Certification of Completion of the Work), Settling Defendant shall preserve and retain all records and documents now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or liability of any person for response actions conducted and to be conducted at the Site, regardless of any corporate retention policy to the contrary. Until 10 years after the Settling Defendants' receipt of EPA's notification pursuant to Paragraph 51.b of Section XIV (Certification of Completion), Settling Defendants shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to the performance of the Work.

103. At the conclusion of this document retention period, Settling Defendants shall notify the United States at least 90 days prior to the destruction of any such records or documents, and, upon request by the United States, Settling Defendants shall deliver any such records or documents to EPA. The Settling Defendants may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other

privilege recognized by federal law. If the Settling Defendants assert such a privilege, they shall provide the Plaintiff with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Settling Defendants. However, no documents, reports or other information created or generated pursuant to the requirements of the Consent Decree shall be withheld on the grounds that they are privileged.

104. Each Settling Defendant hereby certifies individually that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information relating to its potential liability regarding the Site since notification of potential liability by the United States or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Section 104(e) and 122(e) of CERCLA, 42 U.S.C. 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. 6927.

XXVI. NOTICES AND SUBMISSIONS

105. Whenever, under the terms of this Consent Decree, written notice is required to be given or a report or other document is required to be sent by one Party to another, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other Parties in writing. All notices and submissions shall be considered effective upon receipt, unless otherwise provided. Written notice as specified herein shall constitute complete satisfaction of any written notice requirement of the Consent Decree with respect to the United States, EPA, and the Settling Defendants, respectively.

As to the United States:

and

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
Re: DJ # 90-11-2-289/1

As to EPA:

Chief, Special Projects Branch
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866
Attn: Ciba RPM

Chief, New Jersey Superfund Branch
Office of Regional Counsel
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866
Attn: Ciba Attorney

As to the Regional Financial Management Officer:

Chief, Financial Management Branch
Office of Policy & Management
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

As to the Settling Defendants:

David Williams, Technical Director
Ciba Speciality Chemicals Corporation
North America
Oak Ridge Parkway
B.O. Box 71
Toms River, New Jersey 08754-0071

Rachel Deming
Environmental Counsel
Ciba Specialty Chemicals Corporation
540 White Plains Road
Tarrytown, New York 10591

Julie M. Kane
Vice President
Novartis Corporation
608 Fifth Avenue
New York, NY 10020

XXVII. Effective Date

106. The effective date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court, except as otherwise provided herein.

XXVIII. RETENTION OF JURISDICTION

107. This Court retains jurisdiction over both the subject matter of this Consent Decree and the Settling Defendants for the duration of the performance of the terms and provisions of this Consent Decree for the purpose of enabling any of the Parties to apply to the Court at any time for such further order, direction, and relief as may be necessary or appropriate for the construction or modification of this Consent Decree, or to effectuate or enforce compliance with its terms, or to resolve disputes in accordance with Section XIX (Dispute Resolution) hereof.

XXIX. APPENDICES

108. The following appendices are attached to and incorporated into this Consent Decree:

"Appendix A" is the ROD.

"Appendix B" is the SOW.

"Appendix C" is the description and/or map of the Site.

"Appendix D" is the draft easement

XXX. COMMUNITY RELATIONS

109. Settling Defendants shall propose to EPA their participation in the community relations plan to be developed by EPA. EPA will determine the appropriate role for the Settling Defendants under the Plan. Settling Defendants shall also cooperate with EPA in providing information regarding the Work to the public. As requested by EPA, Settling Defendants shall participate in the preparation of such information for dissemination to the public and in public meetings which may be held or sponsored by EPA to explain activities at or relating to the Site.

XXXI. MODIFICATION

110. Schedules specified in this Consent Decree for completion of the Work may be modified by agreement of EPA and the Settling Defendants. All such modifications shall be made in writing.

111. Except as provided in Paragraph 14 ("Modification of the SOW or related Work Plans"), no material modifications shall be made to the SOW without written notification to and written approval of the United States, Settling Defendants, and the Court. Modifications to the SOW that do not materially alter that document may be made by written agreement between EPA and the Settling Defendants.

112. Nothing in this Decree shall be deemed to alter the Court's power to enforce, supervise or approve modifications to this Consent Decree.

XXXII. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

113. This Consent Decree shall be lodged with the Court for a period of not less than thirty (30) days for public notice and comment in accordance with Section 122(d)(2) of CERCLA, 42 U.S.C. § 9622(d)(2), and 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate. Settling Defendants consent to the entry of this Consent Decree without further notice.

114. If for any reason the Court should decline to approve this Consent Decree in the form presented, this agreement is voidable at the sole discretion of any Party and the terms of the agreement may not be used as evidence in any litigation between the Parties.

XXXIII. SIGNATORIES/SERVICE

115. Each undersigned representative of a Settling Defendant to this Consent Decree and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such Party to this document.

116. Each Settling Defendant hereby agrees not to oppose entry of this Consent Decree by this Court or to challenge any provision of this Consent Decree unless the United States has notified the Settling Defendants in writing that it no longer supports entry of the Consent Decree.

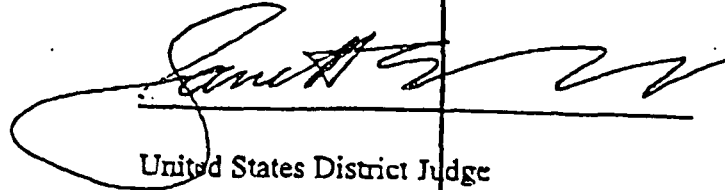
117. Each Settling Defendant shall identify, on the attached signature page, the name, address and telephone number of an agent who is authorized to accept service of process by mail on behalf of that Party with respect to all matters arising under or relating to this Consent Decree. Settling Defendants hereby agree to accept service in that manner and to waive the formal service

requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including, but not limited to, service of a summons.

XXXIV. FINAL JUDGMENT

118. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between and among the United States and the Settling Defendants. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

SO ORDERED THIS 31st DAY OF OCTOBER, 2001.

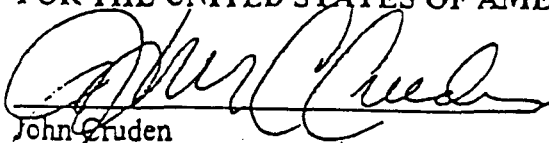


United States District Judge

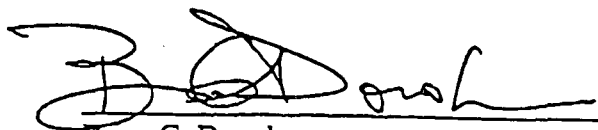
THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Ciba Specialty Chemicals Corporation and Novartis Corporation, relating to the Ciba-Geigy Superfund Site.

FOR THE UNITED STATES OF AMERICA

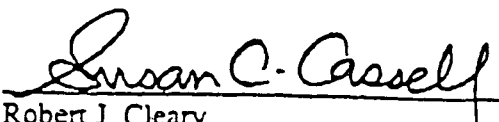
8/23/01
Date


John Cruden
Acting Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice
Washington, D.C. 20530

8/28/01
Date


Brian G. Donohue
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611

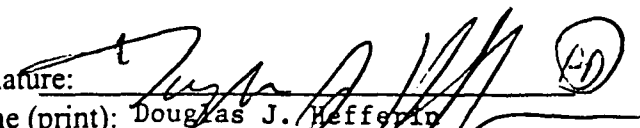
9/4/01
Date


Robert J. Cleary
United States Attorney
District of New Jersey
U.S. Department of Justice
970 Broad Street
Newark, New Jersey 07102

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Ciba Specialty Chemicals Corporation and Novartis Corporation, relating to the Ciba-Geigy Superfund Site.

FOR CIBA SPECIALTY
CHEMICALS CORPORATION

7/18/01
Date

Signature:  (ED)

Name (print): Douglas J. Hefferin

Title: V.P., Environment, Health & Safety

Address: 560 White Plains Road

Tarrytown, NY 10591-5113

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name (print): James A. Maewsky

Title: Assistant Secretary

Address: 560 White Plains Road

Tarrytown, NY 10591-5113

Ph. Number: 914-785-2000

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Ciba Specialty Chemicals Corporation and Novartis Corporation, relating to the Ciba-Geigy Superfund Site.

8/13/01
Date

William J. Muszynski
William J. Muszynski
Acting Regional Administrator, Region 2
U.S. Environmental Protection Agency
290 Broadway
New York, NY 10007-1866


Date

Carl Howard
Carl Howard
Assistant Regional Counsel
U.S. Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Ciba Specialty Chemicals Corporation and Novartis Corporation, relating to the Ciba-Geigy Superfund Site.

FOR NOVARTIS CORPORATION

JULY 18, 2001
Date

Signature: 

Name (print): TERRY BARNETT

Title: PRESIDENT AND CHIEF EXECUTIVE OFFICER

Address: NOVARTIS CORPORATION

608 -5TH AVENUE

N.Y. , NY 10020

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name (print): CORPORATION SERVICE COMPANY

Title: _____

Address: 2711 CENTERVILLE ROAD, SUITE 400

WILMINGTON, DELAWARE

19808

Ph. Number: 800 927-9800

STATEMENT OF WORK

Ciba-Geigy Chemical Corporation Site

Operable Unit 2

I. OBJECTIVES OF SITE CLEANUP AND REMEDIAL WORK TO BE PERFORMED

The objectives of the site cleanup (hereinafter "Work," as defined in Section IV of the Consent Decree (the "Consent Decree") to which this Statement of Work is attached) to be conducted at the Ciba-Geigy Superfund Site (Site) are discussed below. The work involves the design and implementation of the Operable Unit 2 remedy for the Site which is documented in the Record of Decision.

The objectives of the cleanup work at the Site are twofold; to address the potential risks associated with direct contact with surface soils, and to shorten the time frame for the OU1 groundwater remedy to achieve the groundwater restoration goals established in the 1993 ESD.

Risk-Based Preliminary Remediation Goals (PRGs) were developed to address potential direct-contact risks in the Filtercake Disposal Area, the only source area with a direct contact risk. Capping of the Filtercake Disposal Area was selected as the remedial alternative to eliminate the potential long-term risks associated with direct contact.

In order to determine the impact of the source areas on the groundwater cleanup, a model was developed to evaluate various remedial scenarios. The results of an extensive modeling effort indicated that approximately 150,000 cubic yards of contaminated material, from source areas, would need to be remediated in order for the groundwater remediation to be accomplished in about 30 years.

The objectives mentioned above are expected to be met through the implementation of the remedy selected in the Environmental Protection Agency's (EPA's) September 29, 2000 Record of Decision (ROD) for the Site, attached as **Appendix A** to this Consent Decree. The major components of the selected remedy include the following:

On-site bioremediation of approximately 145,000 cubic yards of contaminated soil.

Off-site treatment and/or disposal of approximately 5,000 cubic yards of contaminated soil. This material contains contaminants that are not suited to bioremediation. The volume represents an estimate and is subject to change based on field sampling.

Off-site treatment and disposal of approximately 19,500 drums of filtercakes and lab wastes containing high levels of organic contaminants. The number of drums that will require treatment prior to disposal is an estimate and is subject to change based on field sampling.

Off-site disposal of approximately 12,350 drums of solid waste and other material containing low levels of organic contaminants.

Installation of caps and barrier walls in source areas of the Site where the Cohansey Yellow Clay is present. This perched water management system will prevent the movement of contaminants from the clay into the underlying Primary Cohansey Aquifer. The cap in the Filtercake Disposal Area will also address the potential direct contact risks associated with the surface soils in this area.

Implementation of an in-situ bioremediation system in the Equalization Basins to address contamination below the groundwater table.

Stabilization of portions of the Lime Sludge Disposal Area that do not meet leaching standards.

Establishment of deed restrictions to regulate the use of certain areas of the Site and prevent intrusive activities in areas that are capped.

Optimization of the OUI Groundwater Extraction and Recharge System.

Appropriate environmental monitoring and operations to ensure the effectiveness of the remedy.

The Work to be performed under the Consent Decree shall include, but shall not be limited to, the following:

- A. Pre-remedial design (pre-RD) activities
- B. Remedial design (RD) activities
- C. Implementation of the remedial action (RA); and
- D. Long-term monitoring and operation and maintenance related to the implementation of the remedial action.

II. PERFORMANCE STANDARDS

Performance Standards are the cleanup standards and other measures to achieve the goals of the Remedial Action. The "Selected Remedy" section of the Record of Decision identifies how the goal of the Remedial Action will be met.

The remedy shall comply with all Applicable or Relevant and Appropriate Requirements (ARARs) and TBCs as set forth herein and in the ROD. Accordingly, the remedy will eliminate and reduce the risk to human health and the environment at the Site.

Capping of the Filtercake Disposal Area will eliminate the potential risk of direct contact.

The optimization of the groundwater extraction/treatment system in conjunction with the remediation of the site source areas will reduce overall time need to remediate the contaminated groundwater.

Some of the major ARARs are briefly described below:

Air standards set forth in 40 CFR 50 and NJAC 7:27 would be addressed through monitoring during remedial activities. These standards would apply to all excavations of waste material.

Hazardous waste identification and listing would be performed in accordance with 40 CFR 261 and NJAC 7:26G. Hazardous waste disposal would be performed in accordance with 40 CFR 268 and NJAC 7:26G.

Transport and disposal of solid and hazardous wastes would be performed in accordance with regulations specified by the U.S. Department of Transportation (DOT) 49 CFR 170-179, RCRA (40 CFR 263, 264, and 265) and NJAC 7:26G.

ARARs related to ex-situ bioremediation can be found in NJAC 7:27 and 40 CFR 60 Subpart A. These regulations would require that EPA or Ciba obtain an air permit equivalency to operate the air treatment equipment in the ex-situ bioremediation treatment building.

In addition, the following State of New Jersey requirements are To-Be-Considered (TBC) criteria to the extent within and consistent with the scope of the Remedial Action required by the ROD: the New Jersey Industrial Site Recovery Act (ISRA), P.L. 1993, c.139 (S-1070), as amended by the Hazardous Discharge Remediation Act (HDRA) and by the Brownfields and Contaminated Sites Remediation Act, P.L. 1997, c. 278, as codified at N.J.S.A. 13:1K-6 et seq. and N.J.S.A. 58:10B-1 et seq and the New Jersey Cleanup Criteria developed pursuant to HDRA and the state's Technical Requirements for Soil Remediation. The Source Area remedy meets the requirements of ISRA the HDRA, and the Brownfields and Contaminated Site Remediation Act.

III. PROJECT COORDINATOR AND CONTRACTORS

The Settling Defendants have identified David Williams as Project Coordinator responsible for all work performed under the Consent Decree. Mr. Williams is currently responsible for all remediation activities at the Ciba Geigy site in Toms River and he has the necessary experience in the remediation of hazardous waste sites. Therefore, EPA approves Mr. Williams as project coordinator.

The Settling Defendants shall submit the name of a New Jersey State-licensed professional engineer who will be responsible to certify that all requirements of applicable Federal, State and local laws have been met during the performance of the work.

The names, titles, and qualifications of all contractors and subcontractors proposed to be used in the development and implementation of the work to be performed, shall be submitted to EPA at the time of the Work Plan submissions. Selection of any such Project Coordinator, Professional Engineer, contractor, or subcontractor, shall be subject to approval by the EPA.

Should the Settling Defendants need to change the Project Coordinator, Professional Engineer, contractor, or subcontractor, it may do so by resubmitting the appropriate information. All such changes will be subject to disapproval by EPA.

IV. PRE-REMEDIAL DESIGN ACTIVITIES

The pre-RD activities to be performed in the implementation of the selected remedy for the Site include the following:

- A. Collect geotechnical samples as needed to determine the physical properties of the site soils. This information will be necessary to support the design of bioremediation and drum handling buildings as well as caps and slurry walls.
- B. Collect baseline air monitoring data. This information will be used to support the development of an extensive air monitoring program which will be implemented during the remediation of the source areas.

V. REMEDIAL DESIGN ACTIVITIES

The Remedial Design activities to be performed in the implementation of the selected remedy for the Site will include the development of detailed plans and specifications. It will also need to address the following activities in order to implement the remedy in the Operable Unit 2 ROD.

Air Monitoring - This activity will involve the development of an extensive air monitoring program to be implemented as part of the site remediation. The program will address overall air monitoring for the site as well as activity-specific monitoring for such items as bioremediation, soil excavations, drum handling etc. The air monitoring program will include background or baseline air monitoring to be completed prior to implementation of intrusive remedial activities. Where necessary modeling of potential air emissions will be performed.

Drum Handling - The design will need to address the activities required to safely remove the drums from the Drum Disposal Area. The design will address excavation methods, air monitoring, inspection and staging of drums, as well as sampling, bulking and the ultimate disposal of drummed material.

Transportation and Disposal - The design will address the off-site transportation of all wastes leaving the site for disposal. This includes any wastes being transported to hazardous wastes treatment and/or disposal facilities as well as any wastes being transported to municipal landfills for disposal. The design will identify treatment and/or disposal facilities and appropriate transportation routes. This task will address the interaction with local traffic officials in securing transportation routes.

Soil Excavation - The design will address the excavation and handling of the contaminated soils. The plan will include air monitoring activities. It will also include an overall approach for the excavation of the different source areas including sequencing of excavations as well as addressing excavation rates and schedules. Air monitoring activities as well as post-excavation sampling and the appropriate modeling to verify the success of the excavation effort will need to be addressed.

Ex-Situ Bioremediation of Soils - The design will provide the details as to how the bioremediation program will be implemented. It will address all conceptual design components of the bioremediation program. Some of these components will include; air monitoring, testing of the contaminated soil, building design including air treatment and emissions, the bioremediation process itself, bioremediation outside of the structure and final testing to ensure the success of the process.

Groundwater Extraction and Recharge System (GERS) Optimization - The design will identify a program to optimize the GERS by modifying such items as pumping rates and extraction well locations. Identification of the modeling approach which will be used in evaluating the GERS will be included.

Lime Sludge Area Remediation - The design will identify a strategy for evaluating the effectiveness of the stabilized waste in the lime sludge disposal area. This evaluation will be performed through a series of leaching tests of the stabilized material. It will also outline potential options for dealing with any waste which fails the leaching tests.

Deed Restrictions - The design will identify a program as describing how Settling Defendants will plan to implement deed restrictions. The source areas requiring such restriction were identified in the ROD.

Perched Water Management - The design will identify the procedures for designing the perched water management systems in the source areas identified in the ROD. The perched water management will also address the design of the cap for the Filtercake Disposal Area.

In-Situ Bioremediation - The design will identify the parameters which will be used to build the in-situ bioremediation system to address contaminated groundwater below the equalization basins.

Post Excavation Verification Plan - As part of the design, the procedures for assuring that the Preliminary Remediation Goals (PRGs) have been met will be developed. This will involve procedures for post excavation sampling and the use of the Contaminant Transport Model, developed for the site, to recalculate PRG volumes. The procedures developed in the Post Excavation Verification Plan shall be considered provisions of the ROD and shall include a protocol for random sampling of the source areas and analysis of soils in those areas for the Chemicals of Concern (COCs) for those areas specified in the ROD.

Community Relations - The design will include the development of a Community Relations Plan. Although implementation of the community relations plan is the responsibility of EPA, the Settling Defendants may assist by providing information regarding the Site's history, participating in public meetings, or by preparing fact sheets for distribution to the general public. The Settling Defendants' community relations responsibilities, if any, will be specified in the community relations plan. All Settling Defendants community relations activities will be subject to oversight by EPA.

Emergency Management - The design will include the development of an emergency management plan. It will be developed with input from community officials, school representatives and local emergency management officials.

VI. REMEDIAL DESIGN WORK PLAN

Within **forty five (45) days** of lodging of the Consent Decree, Settling Defendants shall submit a detailed Remedial Design Work Plan for the design of the selected remedy to EPA for review and approval. The Remedial Design Work Plan shall provide for the collection of all data needed for performing the pre-RD and the necessary RD activities.

The Work Plan shall comply with CERCLA and relevant EPA guidance, including the EPA document entitled *Guidance on Oversight of Remedial Designs and Remedial Actions performed by Potentially Responsible Parties*, (OSWER directive 9355.5-01, EPA/540/g-90-001), dated April 1990 and shall be in conformance, *inter alia*, with the *Superfund Remedial Design and Remedial Action Guidance*, dated June 1995, and other EPA guidance documents.

The Remedial Design Work Plan shall include plans and schedules for implementation of pre-RD and RD tasks, and shall include, but not be limited to, the following items:

A. Quality Assurance/Quality Control Project Plan

A Quality Assurance/Quality Control Project Plan (QAPP) shall be prepared consistent with EPA *Requirements for Quality Assurance Project Plans for Environmental Data Operations*, (EPA QA/R-5, October 1998), and shall include the following:

1. A detailed description of the sampling, analysis, and monitoring that shall be performed during the RD phase, consistent with this SOW, the ROD, and the Consent Decree. At a minimum, the QAPP shall provide the following:
 - a. A plan for the performance of air monitoring, as necessary, to ensure that any air emissions resulting from the excavation and transportation activities performed during the RD phase meet applicable or relevant and appropriate air emission requirements;
2. All sampling, analysis, data assessment, and monitoring shall be performed in accordance with the *Region II CERCLA Quality Assurance Manual*, Revision 1, EPA Region 2, dated October 1989, and any updates thereto, or an alternate EPA-approved test method, and the guidelines set forth in the Consent Decree. All testing methods and procedures shall be fully documented and referenced to established methods or standards.
3. The QAPP shall also specifically include the following items:
 - a. An explanation of the way(s) the sampling, analysis, and monitoring will produce data for the RD phase;
 - b. A detailed description of the sampling, analysis, and testing to be performed, including sampling methods, analytical and testing methods, sampling locations and frequency of sampling;
 - c. A map depicting sampling locations; and
 - d. A schedule for performance of specific tasks.
4. In the event that additional sampling locations and analyses are utilized or required, Settling Defendants shall submit to EPA an addendum to the QAPP for approval by EPA.
5. The QAPP shall address the following:

Project Management

- a. Title and Approval Sheet
- b. Table of Contents and Document Control Format
- c. Distribution List
- d. Project/Task Organization and Schedule
- e. Problem Definition/Background
- f. Project/Task Description
- g. Quality Objectives and Criteria for Measurement Data

- h. Special Training Requirements/Certification
- i. Documentation and Records

Measurement/Data Acquisition

- j. Sampling Process Design
- k. Sampling Methods Requirements
- l. Sample Handling and Custody Requirements
- m. Analytical Methods Requirements
- n. Quality Control Requirements
- o. Instrument/Equipment Testing, Inspection, and Maintenance Requirements
- p. Instrument Calibration and Frequency
- q. Inspection/Acceptance Requirements for Supplies and Consumables
- r. Data Acquisition Requirements (Non-Direct Measurements)
- s. Data Management

Assessment/Oversight

- t. Assessments and Response Actions
- u. Reports to Management

Data Validation and Usability

- v. Data Review, Validation, and Verification Requirements
- w. Validation and Verification Methods
- x. Reconciliation with Data Quality Objectives

- 6. In order to provide quality assurance and maintain quality control with respect to all samples to be collected, Settling Defendants shall ensure the following:
 - a. Quality assurance and chain-of-custody procedures shall be performed in accordance with standard EPA protocol and guidance, including the *Region II CERCLA Quality Assurance Manual, Revision 1*, EPA Region 2, dated October 1989, and any updates thereto, and the guidelines set forth in this Consent Decree.
 - b. The laboratory to be used must be specified. If the laboratory participates in the Contract Laboratory Program (CLP) for the analysis to be performed for this investigation, then project specific Performance Evaluation (PE) samples will not be required, as CLP laboratories run EPA PEs on a quarterly basis. If the proposed laboratory does not participate in the CLP for the analyses required, PE samples must be analyzed to demonstrate the capability to

conduct the required analysis prior to being approved for use. Once a non-CLP laboratory has been selected, the laboratory should submit a copy of their Laboratory Quality Assurance Program Plan to EPA for review and approval.

For any analytical work performed, including that done in a fixed laboratory, in a mobile laboratory, or in on-site screening analyses, Settling Defendants must submit to EPA a "Non-CLP Superfund Analytical Services Tracking System" form for each laboratory utilized during a sampling event, within thirty (30) days after acceptance of the analytical results. Upon completion, such documents shall be submitted to the EPA Project Coordinator, with a copy of the form and transmittal letter to:

Regional Sample Control Center Coordinator
EPA Region 2
Division of Environmental Science & Assessment
2890 Woodbridge Avenue, Bldg. 209, MS-215
Edison, NJ 08837

- c. The laboratory utilized for analyses of samples must perform all analyses according to accepted EPA methods as documented in the *Contract Lab Program Statement of Work for Organic Analysis*, (OLM04.2) or the latest revision, and the *Contract Lab Program Statement of Work for Inorganic Analysis*, (ILM04.0) or the latest revision, or other EPA approved methods.
- d. Unless indicated otherwise in the approved QAPP, all data will be validated upon receipt from the laboratory.
- e. Submission of the validation package (checklist, report, and Form I containing the final data) to EPA, prepared in accordance with the provisions of Subparagraph g., below.
- f. Assurance that all analytical data that are validated as required by the QAPP are validated according to the procedures stated in the *EPA Region II Contract Lab Program Organics Data Review and Preliminary Review* (SOP #HW-6, Revision 11), dated June 1996, or the latest revision, and the *Evaluation of Metals Data for the Contract Laboratory Program* (SOP #HW-2, Revision 11), dated January 1992 or the latest revision, or EPA-approved equivalent procedures. Region 2 Standard Operating Procedures are available at: <http://www.epa.gov/region02/smb/sops.htm>

- g. Unless indicated otherwise in the approved QAPP, Settling Defendants shall require deliverables equivalent to CLP data packages from the laboratory for analytical data. Upon the EPA's request, Settling Defendants shall submit to the EPA the full documentation (including raw data) for this analytical data. EPA reserves the right to perform an independent data validation, data validation check, or qualification check on generated data.
- h. Settling Defendants shall insert a provision in its contract(s) with the laboratory utilized for analyses of samples, which will require granting access to EPA personnel and authorized representatives of the EPA for the purpose of ensuring the accuracy of laboratory results related to the Site.

B. Health and Safety Contingency Plan

A Health and Safety Contingency Plan (HSCP) for all activities performed under the Consent Decree shall be developed by Settling Defendants to address the protection of public health and safety and the response to contingencies that could impact public health, safety, and the environment. A HSCP shall be developed for the Remedial Design and a new or amended HSCP shall be developed for the Remedial Action. The HSCP shall satisfy the requirements of the *Occupational Safety and Health Guidance for Hazardous Waste Site Activities*, (June 1990, DHHS NIOSH Publication No. 90-117), and the Occupational Safety and Health Administration, U.S. Department of Labor (OSHA) requirements cited below:

1. All site activities shall be performed in such a manner as to ensure the safety and health of personnel so engaged. All Site activities shall be conducted in accordance with all pertinent general industry (29 CFR Part 1910) and construction (29 CFR Part 1926) OSHA standards, and EPA's *Standards Operating Safety Guides* (OSWER, 1988), as well as any other applicable State and municipal codes or ordinances. All Site activities shall comply with those requirements set forth in OSHA's final rule entitled *Hazardous Waste Operations and Emergency Response*, 29 CFR §1910.120, Subpart H.
2. The HSCP shall include, at a minimum, the following items:
 - a. Plans showing the location and layout of any temporary facilities to be constructed on or near the Site;
 - b. Description of the known hazards and evaluation of the risks associated with the Site and the potential health impacts related to the Site activities;

- c. List of key personnel and alternates responsible for Site safety, response operations, and protection of the public;
- d. Description of levels of protection (based on specified standards) to be utilized by all personnel;
- e. Delineation of Work, decontamination, and safe zones, and definitions of the movement of zones;
- f. Description of decontamination procedures for personnel and equipment, and handling and removal of disposable clothing or equipment;
- g. Incidental emergency procedures which address emergency care for personnel injuries and exposure problems, and containment measures. These procedures shall include evacuation routes, internal and external communications procedures for response to fire, explosion, or other emergencies, the name of the nearest hospital and the route to that hospital. Local agencies with the capability to respond to emergencies shall be identified and their capabilities shall be described. A description of the procedures for informing the community of these measures shall be outlined;
- h. Description of the personnel medical surveillance program in effect;
- i. Description of monitoring for personnel safety;
- j. Description of routine and special personnel training programs; and
- k. Description of an air monitoring program to determine concentrations of airborne contaminants to which workers on-Site and persons near the Site boundary may be exposed. The results of work-zone air monitoring may be used as a trigger for implementing Site-boundary air monitoring.

C. Description of Pre-Remedial Design and Remedial Design Tasks

The Remedial Design (RD) Work Plan shall include a detailed description of all other pre-RD and RD tasks (see Sections IV. and V., above) to be performed, along with a schedule for performance of those tasks. Such tasks shall include, at a minimum, the preparation of the RD Reports required by Section VIII., below, and tasks necessary to ensure compliance with ARARs, as outlined herein and in the ROD. The Remedial Design Work Plan shall include an outline of the requirements of the RD Reports.

1. Access and Other Approvals

The Remedial Design Work Plan shall include descriptions of any approvals and institutional controls which Settling Defendants will need to comply with this Consent Decree, with the exception of those approvals needed from the EPA. This description shall detail how such approvals will be sought, and shall include a schedule for obtaining all necessary approvals. Such approvals shall include the consent of owners of property at or near the Site regarding access to conduct sampling, monitoring or other activities, in accordance with the Consent Decree, and approval from any off-site facility accepting waste materials from the Site. This description shall be amended if subsequent approvals are required.

2. RD Schedules, Draft Schedule for Remedial Action, and Monitoring

The Remedial Design Work Plan shall include a schedule covering all pre-RD and RD activities, including but not limited to, the submittal of the RD Reports listed in **Section VIII., below**. The Remedial Design Work Plan shall also include a draft schedule for remedial action ("RA") and monitoring activities. The schedule shall be in the form of a task/subtask activity bar chart or critical path method sequence of events.

3. The draft schedule for RA and monitoring activities may be revised during the remedial process, subject to the EPA's approval (see **Sections VIII. A. 4. and VIII. C. 8., below**).

4. The Remedial Design Work Plan shall provide a schedule for the completion and submittal to EPA of the Final Design Report. Typically, a project of this scope could be completed within 18 months of EPA's written notification of approval of the Remedial Design Work Plan. The Remedial Design schedule shall take into account all Remedial Design submissions required by this Statement of Work.

5. The draft schedule for the implementation of the Remedial Action shall be provided in the Remedial Design Work Plan. The schedule shall provide for the completion of the Remedial Action within the currently estimated time frame which is **eight years** from EPA approval of the Remedial Action Work Plan (See Feasibility Study for estimated time and associated assumptions to complete the remedial action). The schedule may be modified, with the approval of EPA, based on the results of the remedial design.

VII. APPROVAL OF REMEDIAL DESIGN WORK PLAN

EPA will either approve the Remedial Design Work Plan, or will require modification of such plan, in accordance with the procedures set forth in the Consent Decree. Settling Defendants shall implement the EPA-approved Remedial Design Work Plan in accordance with the schedules contained therein.

VIII. REMEDIAL DESIGN

Settling Defendants shall perform the pre-RD and RD activities in conformance with the Remedial Design Work Plan approved by the EPA and within the time frames specified in the RD schedule contained therein. The RD shall include the preparation of a preliminary design (35% completion), pre-final design (95% completion) and a final design (100% completion). Based upon the review of the preliminary design, EPA will determine the need for the Settling Defendants to prepare and submit an intermediate design.

A. Remedial Design Reports

The reports shall be submitted to the EPA and NJDEP in accordance with the schedule set forth in the approved Remedial Design Work Plan. Each RD report shall include a discussion of the design criteria and objectives, with emphasis on the capacity and ability to meet design objectives successfully. Each report shall also include the plans and specifications that have been developed at that point in time, along with a design analysis. The design analysis shall provide the rationale for the plans and specifications, including results of all sampling and testing performed, supporting calculations and documentation of how these plans and specifications will meet the requirements of the ROD and shall provide a discussion of any impacts these findings may have on the RD. Each of the design reports shall also include the following items (to the extent that work has been performed regarding the items), as appropriate:

1. A technical specification for photographic documentation of the remedial construction work;
2. A discussion of the manner in which the Remedial Action will achieve the Performance Standards;
3. A strategy for identifying how Settling Defendants will implement deed restrictions. The source areas requiring such restriction are identified in the ROD.
4. A draft schedule for remedial action activities, and a preliminary schedule for monitoring activities.

B. Additional Preliminary and Intermediate Remedial Design Report Requirements

The Preliminary Design Report (35%) and Intermediate (65%) Design Report, if required by EPA, shall include the following:

1. Preliminary drawings showing general arrangement of all work proposed;
2. A discussion of the manner in which the pre-design components detailed in Section IV., above, for the Remedial Action will be considered;
3. Draft Piping & Instrumentation diagrams, as necessary, showing all equipment and control systems;
4. Table of Contents for the specifications, including a listing of items from the Construction Specifications Institute master format that are expected to be included in the construction specifications. This master format is presented in the Construction Specifications Institute's *Manual of Practice*, 1985 edition, available from the Construction Specifications Institute, 601 Madison Street, Alexandria, Virginia 22314;
5. Engineering plans representing an accurate identification of existing Site conditions and an illustration of the work proposed. Typical items to be provided on such drawings include, at a minimum, the following:
 - a. Title sheet including at least the title of the project, a key map, the name of the designer, date prepared, sheet index, and EPA/NJDEP Project identification;
 - b. All property data including owners of record for all properties within 1000 feet of the Site Source Areas;
 - c. A Site survey including the distance and bearing of all property lines that identify and define the project Site;
 - d. All easements, rights-of-way, and reservations;
 - e. All buildings, structures, wells, facilities, and equipment (existing and proposed) if any;
 - f. A topographic survey, including existing and proposed contours and spot elevations for all areas that will be affected by the remedial activities, based on U.S. Coast and Geodetic Survey data;
 - g. All utilities, existing and proposed;
 - h. Location and identification of all significant natural features

including, *inter alia*, wooded areas, water courses, wetlands, flood hazard areas, and depressions;

- i. Flood hazard data and 100-year and, if appropriate, the 500-year flood plain delineation;
 - j. North arrow, scale, sheet numbers and the person responsible for preparing each sheet;
 - k. Decontamination areas, staging areas, borrow areas and stockpiling areas;
 - l. Miscellaneous detail sheets;
 - m. Definitions of all symbols and abbreviations; and
 - n. A specification for a sign at the site, stating that the project is being performed under EPA oversight, and providing an EPA telephone number for further information.
6. Survey work that is appropriately marked, recorded and interpreted for mapping, property easements and design completion;
 7. Drawings of all proposed equipment, improvements, details and all other construction and installation items to be developed in accordance with the current standards and guidelines of the State Board of Professional Engineers and Land Surveyors. Drawings shall be of standard size, approximately 24" x 36".
 8. Engineering plans indicating, at a minimum, the following:
 - a. Site security measures;
 - b. Roadways; and
 - c. Electrical, mechanical, structural, and HVAC drawings, if required.

C. Additional Pre-Final/Final Remedial Design Requirements

The pre-final and final RD reports shall also include the following:

1. Final plans and specifications;
2. An Outline of the Long-Term Monitoring Requirements for the site. Information on such requirements can be found in the *Superfund RD and*

RA Guidance, dated June 1995, OSWER Directive 9355.0-4A. The Long-Term Monitoring Outline shall include, but not be limited to, the following:

- a. a description of the personnel requirements, responsibilities, and duties, including a discussion for training, lines of authority;
 - b. a description of all sampling, analysis, and monitoring to be conducted under the Consent Decree; and
3. A Construction Quality Assurance Project Plan (CQAPP), which shall detail the approach to quality assurance during construction activities at the Site, shall specify a quality assurance official ("QA Official"), independent of the construction contractor, to conduct a quality assurance program during the construction phase of the project. The CQAPP shall address sampling, analysis, and monitoring to be performed during the remedial construction phase of the Work. Quality assurance items to be addressed include, at a minimum, the following:
- a. Inspection and certification of the Work;
 - b. Measurement and logging as required;
 - c. Field performance and testing;
 - d. As-built drawings and logs;
 - e. Testing of the Work to establish whether the design specifications are attained; and
 - f. Testing methods appropriate to remedial construction including, at a minimum, testing of remedial construction materials, as necessary, prior to use, and testing of constructed remedial components to ensure that they meet design specifications.
4. A report describing those efforts made to secure access and institutional controls and obtain other approvals and the results of those efforts (see **Section VI. C., above**). Legal descriptions of property or easements to be acquired shall be provided.
5. A final engineer's construction cost estimate, which may be provided under separate cover concurrent with submittal of the Final RD Report.
6. A plan for implementation of construction and construction oversight.
7. A method for selection of the construction contractor(s).

8. A proposed schedule for implementing all of the above including all remedial action contracts needed to perform all work under the Consent Decree.

IX. APPROVAL OF REMEDIAL DESIGN REPORTS

- A. EPA will review and comment on all Remedial Design submittals. Settling Defendants shall make those changes required by the EPA's comments/modifications in accordance with the procedures set forth in the Consent Decree.
- B. Changes required by EPA's comments on the Preliminary Design Reports and, if required, Intermediate Remedial Design Reports shall be made in the subsequent Remedial Design Report. Changes required by EPA's comments on the pre-Final Remedial Design Report shall be made in the Final RD Report.
- C. EPA will either approve the Final Remedial Design Report or require modification of it, in accordance with the procedures set forth in the Consent Decree. The EPA-approved Final Remedial Design Report shall also be referred to as the "Final Design Report".

X. REMEDIAL ACTION

- A. Within **forty five (45) days** of EPA's approval of the Final Remedial Design Report, the Settling Defendants shall award contract the initial Remedial Action contract. For the purposes of this Consent Decree, the Construction Management Contract is not considered a Remedial Action Contract. The Settling Defendants may request additional time to award the initial Remedial Action Contract. Such a request, must be supported with a detailed justification. EPA shall notify the Settling Defendants, in writing, of any actions taken in response to an additional time request.
- B. Within **forty five (45) days** of the award of the initial RA contract, the Settling Defendants shall submit the Remedial Action Work Plan (RAWPs) for the remedial construction activities. The Settling Defendants may propose separation of the Remedial Action Work Plan into separate components using separate contracts and separate Remedial Action Work Plans. Each RAWP shall include, at a minimum, the following items:
 1. If applicable, a "Request for Modification of Approved Final RD Report," including any requests for modification of the approved Final Design Report, based on construction methods identified by the contractor(s), or

proposed modification of the construction schedule developed under **Section VIII., above**, or any other requests for modification, subject to EPA approval in its sole discretion.

2. A Site Management Plan (SMP) for Remedial Action activities. The SMP for RA shall include, at a minimum, the following items:
 - a. Tentative identification of the Remedial Action Project Team (including, but not limited to the Construction Contractor).
 - b. A final schedule for the completion of the RA and all major tasks therein, as well as a schedule for completion of required plans, and other deliverables (see **Section VI. C., above**).
 - c. Methodology for implementation of the Construction Quality Assurance Plan (developed during the RD).
 - d. Methodology for the development and implementation of the Long-Term Monitoring Plan.
 - e. Procedures and plans for the decontamination of construction equipment and the disposal of contaminated materials.
 - f. Methods for satisfying permitting requirements.
 - g. Discussion of the methods by which construction operations shall proceed. Discussion shall include the following:
 - (1) Timing of and manner in which activities shall be sequenced;
 - (2) Preparation of the Site including security, utilities, decontamination facilities, construction trailers, and equipment storage;
 - (3) Coordination of construction activities;
 - (4) Site maintenance during the RA;
 - (5) Coordination with local authorities regarding contingency planning and potential traffic obstruction; and
 - (6) Entry and access to the Site during the construction period(s) and periods of inactivity, including provisions for decontamination, erosion control, and dust control.

- h. Discussion of construction quality control, including:
 - (1) Methods of performing the quality control inspections, including when inspections should be made and what to look for;
 - (2) Control testing procedures for each specific test. This includes information which authenticates that personnel and laboratories performing the tests are qualified and the equipment and procedures to be used comply with applicable standards;
 - (3) Procedures for scheduling and managing submittals, including those of subcontractors, off-Site fabricators, suppliers, and purchasing agents; and
 - (4) Reporting procedures including frequency of reports and report formats.
- 3. A Quality Assurance/Quality Control Project Plan (QAPP) shall be prepared consistent with EPA *Requirements for Quality Assurance Project Plans for Environmental Data Operations*, (EPA QA/R-5, October 1998) (see Section VI. A., above, for these requirements).
- 4. An updated HSCP for the Remedial Construction phase of the Work (see Section VI. B., above, for these requirements). The HSCP shall address health and safety measures to be implemented and observed by construction personnel, as well as recommended health and safety measures for the adjacent community and general public, together with a description of the program for informing the community of these recommendations. The HSCP shall include the name of the person responsible in the event of an emergency situation, as well as the necessary procedures that must be taken in the event of an emergency, as outlined in the Consent Decree.

C. Approval of Remedial Action Work Plan

EPA will either approve the Remedial Action Work Plan (RAWP) or a portion of the RAWP, or require modification of it in accordance with the procedures set forth in the Consent Decree.

D. Performance of Remedial Action

1. Upon the EPA's written approval of the RAWP, the Settling Defendants shall initiate the remedial action in accordance with the RAWP and the approved Final Design Report, which includes the approved remedial action schedule.
2. During performance of the remedial action, Settling Defendants may identify and request EPA approval for field changes to the approved RAWP, Final Design Report and construction schedule, as necessary, to complete the work. EPA will either approve, disapprove, or require modification of any requests for field changes in accordance with the procedures set forth in the Consent Decree.
3. Also, the Settling Defendants shall perform a recalculation of the PRG volumes, after the estimated volume of material is removed from a specific source area. This recalculation of the PRG volumes shall be performed in accordance with the Post Excavation Verification Plan developed as part of the remedial design. Upon EPA's approval of any such recalculated volumes, Settling Defendants shall promptly excavate any additional soil specified in the recalculation. The recalculation shall be deemed a provision of the ROD, in accordance with Paragraph 68 of the Consent Decree, and thus any EPA action regarding any recalculation shall not be subject to dispute resolution or judicial review.

E. Long -Term Monitoring Program

1. In accordance with the approved Remedial Action Work Plan and at least 90 days prior to the completion of the Remedial Action, the Settling Defendants shall submit to the EPA a Long-Term Monitoring Plan. The plan shall be prepared in accordance with the *Superfund RD and RA Guidance*, dated June 1995, OSWER Directive 9355.0-4A
2. The Long-Term Monitoring Plan shall include, at a minimum, the following:
 - a. An amended QAPP consistent with **Section VI.A., above**, appropriate to the Remedial Action monitoring phase.
 - b. An HSCP for monitoring activities consistent with **Section VI.B., above**, appropriate to the Remedial Action monitoring phase.
 - c. A discussion of potential problems and remedies for such problems.

- d. A discussion of alternative procedures in the event of system failure.
 - e. A Long-Term Monitoring schedule that identifies the activities (maintenance, sampling and inspections etc.) and the timing of those activities.
- 3. EPA will either approve the Long-Term Monitoring Plan or require modification of it, in accordance with the procedures set forth in the Consent Decree.
 - 4. Proposed modifications to the approved Long-Term Monitoring Plan may be submitted to EPA for consideration upon completion of construction or thereafter if Settling Defendants can demonstrate that such modifications would enhance and/or maintain the environmental monitoring programs.
 - 5. EPA will either approve, disapprove, or require modifications of the request for modification of the Long-Term Monitoring Plan in accordance with the procedures set forth in the Consent Decree.

XI. PRE-FINAL INSPECTIONS, REMEDIAL ACTION REPORTS, NOTICE OF CONSTRUCTION COMPLETION

Based upon the sequencing of the Remedial Action activities in the approved RAWP and the actual implementation of the work, EPA will determine the timing of pre-final inspections, Remedial Action reports and any interim certifications of completion of construction requested by the Settling Defendants. Different components of the Remedial Action will likely result in a series of Remedial Action reports and interim certification of completion of construction as specific components of the remedy are completed. The requirements of pre-final inspections and remedial action reports are identified below.

- A. At least **fourteen (14) days** prior to the completion of the Remedial Action, the Settling Defendants and its contractor(s) shall be available to accompany EPA personnel and/or their representatives on a pre-final inspection. Each pre-final inspection shall consist of a walkover of the Site to determine the completeness of the Remedial Action and its consistency with the Remedial Design, the Consent Decree, the ROD and applicable Federal and State laws, rules, and regulations.
- B. Following the pre-final inspection, EPA will either specify the necessary corrective measures to the remedial action work or determine that Remedial Action is complete. If EPA requires corrective measures to the Remedial Action Work, the Settling Defendants shall undertake the corrective measures according to a

schedule approved by EPA. Within **fourteen (14) days** after completion of the Remedial Action corrective measures, the Settling Defendants and their contractor(s) shall be available to accompany EPA personnel or their representatives on an inspection as provided for in the preceding paragraph. Said inspection will be followed by further directions and/or notifications by EPA as provided above in this paragraph.

- C. The Settling Defendants shall submit a Draft Remedial Action Report within **sixty (60) days** of EPA's determination that Remedial Action Work is complete as set forth in **Subsection B., above**. The Final Comprehensive Remedial Action Report shall include the following sections:

1. Introduction

- a. Include a brief description of the location, size, environmental setting, and operational history of the site.
- b. Describe the operations and waste management practices that contributed to contamination of the site.
- c. Describe the regulatory and enforcement history of the site.
- d. Describe the major findings and results of site investigation activities.
- e. Describe prior removal and remedial activities at the site.

2. Background

- a. Summarize requirements specified in the ROD. Include information on the cleanup goals, institutional controls, monitoring requirements, operation and maintenance requirements, and other parameters applicable to the design, construction, operation, and performance of the Remedial Action..
- b. Provide additional information regarding the basis for determining the cleanup goals, including planned future land use.
- c. Summarize the Remedial Design, including any significant regulatory or technical considerations or events occurring during the preparation of the Remedial Design.
- d. Identify and briefly discuss any ROD amendments, explanation of significant differences, or technical impracticability waivers.

3. Remedial Action Activities

- a. Provide a step-by-step summary description of the activities undertaken to construct and implement the RA (e.g., mobilization and site preparatory work; construction of the treatment system; associated site work, such as fencing and surface water collection and control; system operation and monitoring; and sampling activities).
- b. Refer the reader to the Appendices for characteristics, site conditions, and operating parameters for the system.

4. Chronology of Events

- a. Provide a tabular summary that lists the major events for the Remedial Action, and associated dates of those events, starting with ROD signature.
- b. Include significant milestones and dates, such as, remedial design submittal and approval; ROD amendments; mobilization and construction of the remedy; significant operational events such as treatment system, application start-up, monitoring and sampling events, system modifications, operational down time, variances or noncompliance situations, and final shutdown or cessation of operations; final sampling and confirmation-of-performance results; required inspections; demobilization; and monitoring activities.

5. Performance Standards and Construction Quality Control

- a. Describe the overall performance of the technology in terms of comparison to cleanup goals.
- b. For treatment remedies, identify the quantity of material treated, the strategy used for collecting and analyzing samples, and the overall results from the sampling and analysis effort.
- c. Provide an explanation of the approved construction quality assurance and construction quality control requirements or cite the appropriate reference for this material. Explain any substantial problems or deviations.
- d. Provide an assessment of the performance data quality, including the overall quality of the analytical data, with a brief discussion of

QA/QC procedures followed, use of a QAPP, comparison of analytical data with data quality objectives.

6. Final Inspection and Certifications

- a. Report the results of the various Remedial Action contract inspections, and identify noted deficiencies.
- b. Briefly describe adherence to health and safety requirements while implementing the Remedial Action. Explain any substantial problems or deviations.
- c. Summarize details of the required deed restrictions and describe how such controls will be maintained.
- d. Describe results of pre-certification inspection.
- e. This section shall include a certification statement, signed by a responsible corporate official of one or more of the Settling Defendants or by the Settling Defendants Project Coordinator, which states the following:

"To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

7. Long-Term Monitoring Activities

- a. Describe the general activities for post-construction monitoring and maintenance activities, such as monitoring, site maintenance, and closure activities.
- b. Identify potential problems or concerns with such activities.

8. Summary of Project Costs

- a. Provide the actual final costs for the project. If actual costs are not available, provide estimated costs.
- b. Provide the costs previously estimated in the ROD for the selected remedy, including, as applicable, RA capital costs, RA operating

costs, post-RA monitoring costs, and number of years of O&M. Adjust the estimates to the same dollar basis year as the actual project costs, and provide the index used.

- c. Compare actual RA costs to the adjusted ROD estimates. If outside range of -30 to +50 percent, explain the reasons for differences.
- d. For treatment remedies, calculate unit costs based on the sum of the actual RA capital and RA operating costs divided by the quantity of material treated.

9. Observations and Lessons Learned

Provide site-specific observations and lessons learned from the project, highlighting successes and problems encountered and how they were resolved.

10. Contact Information

Provide contact information (names, addresses, phone numbers, and contract/reference data) for the major design and remediation contractors, as applicable.

11. Appendices: Cost and Performance Summary

- a. The specific parameters for documenting cost and performance information are presented in the *Guide to Documenting and Managing Cost and Performance Information for Remediation Projects*, EPA 542-B-98-007.
- b. Identify the matrix characteristics and site conditions that most affected the cost and performance, the corresponding values measured for each characteristic or condition, and the procedures used for measuring those characteristics or conditions.
- c. Identify the operating parameters specified by the remediation contractor that most affected the cost and performance, the corresponding values measured for each parameter, and the procedures used for measuring those parameters.
- d. Provide a detailed breakout of the actual Remedial Action capital costs and estimated monitoring and maintenance costs.

- e. Provide supplemental information in appendices to the Remedial Action Report. These could include a map of the site and operable unit, a schematic of the treatment system, supplemental performance information, and a list of references.

XII. PERFORMANCE OF CONTINUED LONG-TERM MONITORING PROGRAM

Upon EPA's approval of any portion of the Remedial Action, as identified in Section XI, above, the Settling Defendants shall implement any Long-Term Monitoring associated with the approved Remedial Action in accordance with the EPA-approved Long-Term Monitoring Plan. The Long-Term Monitoring Plan requirements are found in Section X. E.

XIII. INSTITUTIONAL CONTROLS

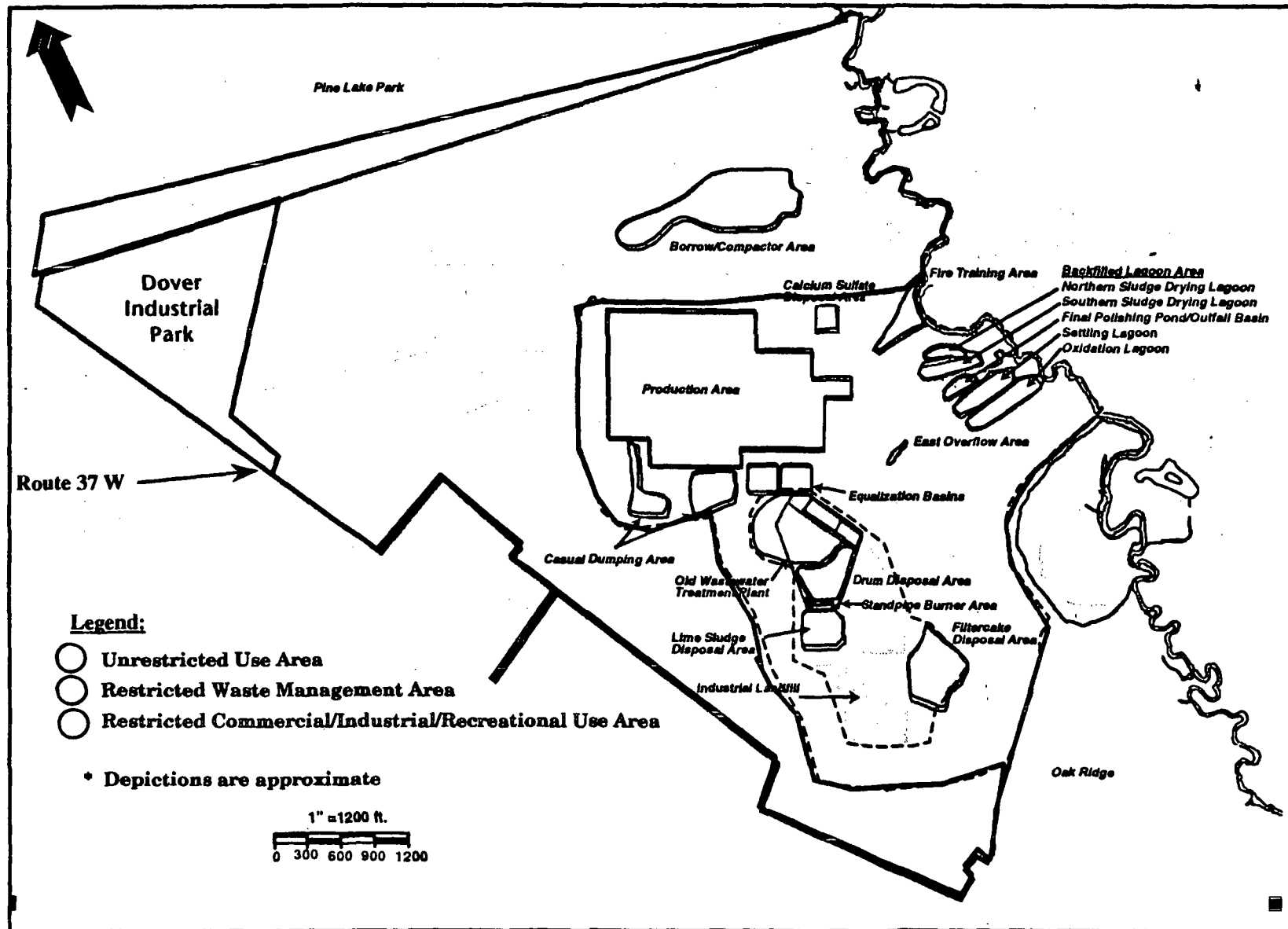
Institutional Controls and/or Deed Restrictions are required by the Record of Decision. The Settling Defendants shall secure the necessary Deed Restrictions in accordance with the procedures set forth in the Consent Decree. The restrictions shall be maintained until EPA notifies Settling Defendants that EPA has determined, after a reasonable opportunity for review and comment by the State, that the restrictions may be lifted from the Site, or a portion of the Site, without posing a threat to human health and the environment.

XIV. CERTIFICATION OF COMPLETION OF THE WORK

Within sixty (60) days after Settling Defendants conclude that all phases of the Work required by the Consent Decree have been fully performed, Settling Defendants shall schedule and conduct a pre-certification inspection to be attended by Settling Defendants and EPA. If, after the pre-certification inspection, Settling Defendants still believes that the Work has been fully performed, Settling Defendants shall submit a written report by a New Jersey State registered professional engineer stating that the Work has been completed in full satisfaction of the requirements of this Consent Decree. If, after review of the written report, EPA, after reasonable opportunity for review and comment by the State, determines that any portion of the Work has not been completed in accordance with this Consent Decree, EPA will notify Settling Defendants in writing of the activities that must be undertaken by Settling Defendants pursuant to this Consent Decree to complete the Work.

If EPA concludes, based on the initial or any subsequent request for Certification of Completion by Settling Defendants, that the Work has been performed in accordance with this Consent Decree, EPA will so notify Settling Defendants in writing.

Ciba-Geigy Superfund Site Toms River, Ocean County, New Jersey



- e. Provide supplemental information in appendices to the Remedial Action Report. These could include a map of the site and operable unit, a schematic of the treatment system, supplemental performance information, and a list of references.

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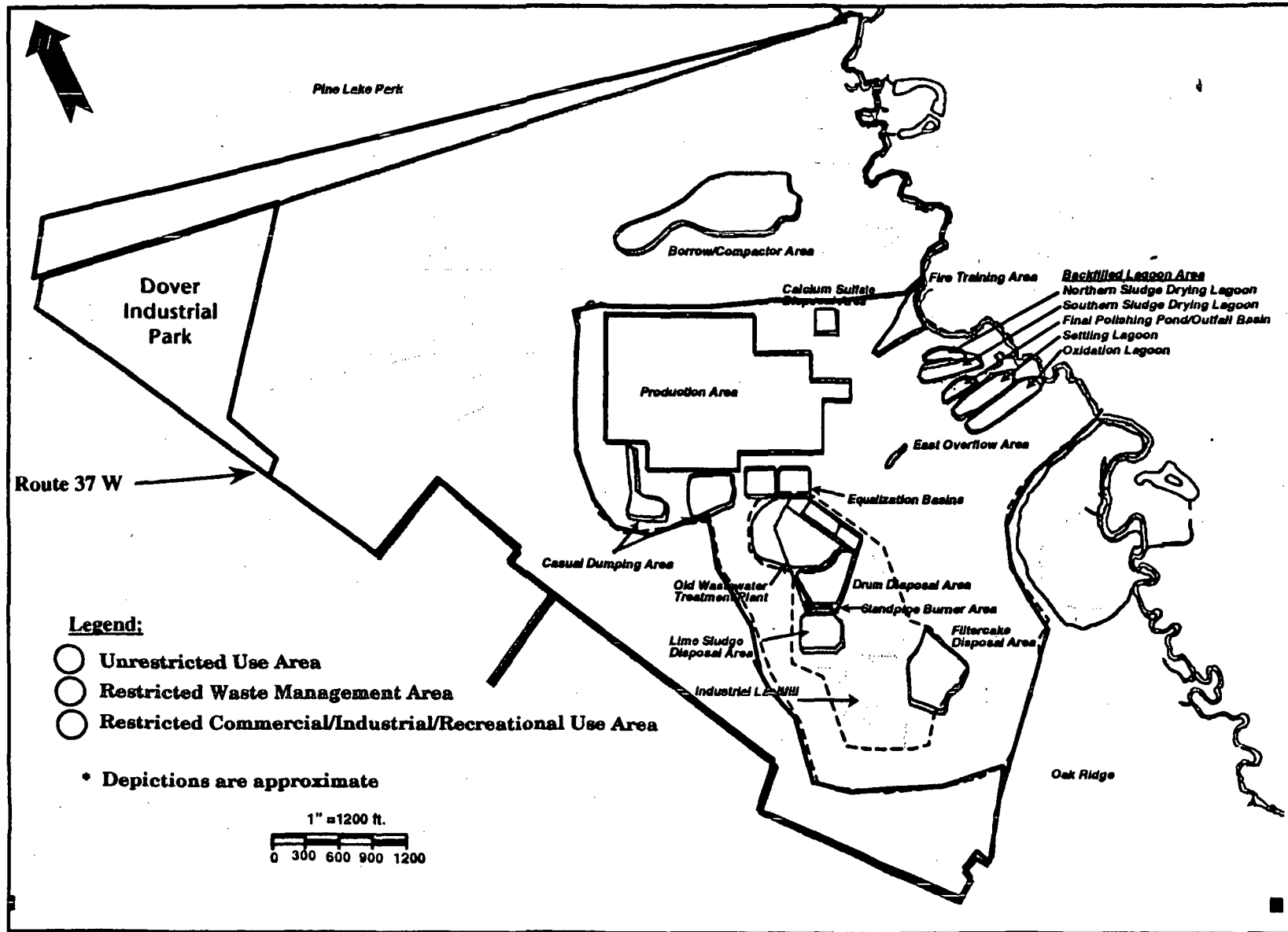
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If EPA concludes, based on the initial or any subsequent request for Certification of Completion by Settling Defendants, that the Work has been performed in accordance with this Consent Decree, EPA will so notify Settling Defendants in writing.

Ciba-Geigy Superfund Site Toms River, Ocean County, New Jersey



APPENDIX D

to Consent Decree in the matter of
United States of America v. Ciba Specialty Chemicals Corporation, and Novartis Corporation
relating to the Ciba-Geigy Superfund Site
form of

ENVIRONMENTAL PROTECTION EASEMENT

[in the event deed restrictions have been finalized at the time this easement is executed,
add: **AND DECLARATION OF RESTRICTIVE COVENANTS**]

This Environmental Protection Easement [in the event deed restrictions have been finalized at the time this easement is executed, add: and Declaration of Restrictive Covenants] is made this ____ day of _____, 2001 by and between Ciba Specialty Chemicals Corporation, having an address of 560 White Plains Road, P.O. Box 2005, Tarrytown, NY 10591 ("Grantor")], _____
_____, ("Grantee"), having an address of _____

WITNESSETH:

WHEREAS, Grantor is the owner of a parcel of land located in the county of Ocean, State of New Jersey, more particularly described on Exhibit A attached hereto and made a part hereof together with any buildings and improvements thereon and appurtenances thereto (the "Property"); and

WHEREAS, the Property is part of the Ciba-Geigy Superfund Site ("Site"), which the U.S. Environmental Protection Agency ("EPA"), pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9605, placed on the National Priorities List, as set forth in Appendix B of the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), 40 C.F.R. Part 300, by publication in the Federal Register on September 8, 1983, __ Fed. Reg. ____; and

WHEREAS, in a Record of Decision dated September 29, 2001 (the "ROD"), the Regional Administrator of EPA Region II selected, and the New Jersey Department of Environmental Protection ("NJDEP") concurred with, a remedial action for the Site, which provides, in part, for the following actions: i) on-site bioremediation of approximately 145,000 cubic yards of contaminated soil; ii) off-site treatment and/or disposal of approximately 5,000 cubic yards of contaminated soil containing material which is not suited to bioremediation; iii) off-site treatment and disposal of approximately 19,500 drums of filtercakes and lab wastes containing high levels of organic contaminants; iv) off-site disposal of approximately 12,350 drums of solid waste and other material containing low levels of organic contaminants; v) installation of caps and barrier walls in areas of the site where the Cohansey Yellow Clay is

present; vi) implementation of an in-situ bioremediation system in the Equalization Basins to address contamination below the groundwater table; vii) stabilization of portions of the Lime Sludge Disposal Area that do not meet leaching standards; viii) establishment of deed restrictions to regulate the use of certain areas of the site and prevent intrusive activities in areas that are capped; ix) optimization of the Groundwater Extraction and Recharge System implemented as part of the first operable unit response action; x) appropriate environmental monitoring to ensure the effectiveness of the Selected Remedy; and

WHEREAS, grantor Ciba Specialty Chemical Corporation has agreed to perform the remedial design and remedial action selected in the ROD; and

WHEREAS, the parties hereto have agreed that Grantor shall grant [in the event deed restrictions have been finalized at the time this easement is executed replace: "an easement" with "a permanent easement"] an easement and covenant to provide a right of access over the Property to the United States on behalf of the EPA and its representative for purposes of implementing, facilitating and monitoring the response action; and [in the event deed restrictions have been finalized at the time this easement is executed add: to provide a means of enforcing the restrictions imposed on the Property pursuant to the Consent Decree that will run with the land for the purpose of protecting human health and the environment;]

NOW, THEREFORE:

1. Grant: Grantor, on behalf of itself, its successors and assigns, in consideration of the terms of the Consent Decree in the case of *United States of America v. Ciba Specialty Chemicals Corporation, and Novartis Corporation*, Civ. No. _____ United States District Court for the District of New Jersey ("Consent Decree") and other good and valuable consideration, does hereby give, grant, covenant and declare in favor of the Grantee that the Property shall be subject to the rights of access set forth below in paragraph 3, and does give, grant and convey to the Grantee with general warranties of title the [in the event deed restrictions have been finalized at the time this easement is executed, add: perpetual] right to enforce the rights of access [in the event deed restrictions have been finalized at the time this easement is executed, add: and restrictions on use imposed pursuant to the Consent Decree, and delete "during performance of the Work"] during performance of the Work in the area of the Property to which the easement is granted.
2. Purpose: It is the purpose of this instrument to convey to the United States an easement which will run with the land, for access for the purpose of conducting any activity related to, the Consent Decree [in the event deed restrictions have been finalized at the time this easement is executed, add: and for the purpose of enforcing land/water use restrictions or other restrictions imposed pursuant to the Consent Decree].

3. Terms of Right of access: The United States and the EPA shall have an irrevocable, permanent, and continuing right, running with the land, to access to the Property at all reasonable times as set forth below.

a) Purposes of Right of Access:

1. monitoring the Work;
2. verifying any data or information submitted to the United States (or the State);
3. conducting investigations relating to contamination at or near the Site
4. obtaining samples;
5. assessing the need for, planning, or implementing additional response actions (e.g., as set forth in paragraph 20) at or near the Site;
6. implementing the Work pursuant to the conditions set forth in Paragraph 88 of the Consent Decree;
7. inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Settling Defendants or their agents, consistent with Section XXIV (Access to Information) of the Consent Decree;
8. assessing Settling Defendants' compliance with the Consent Decree;
9. determining whether the Site or other property is being used in a manner that is prohibited or restricted; or that may need to be prohibited or restricted, by or pursuant to the Consent Decree;

[in the event that deed restrictions have been finalized at the time this easement is executed, add: 10) enforcing restrictions, or any modifications thereto, on use imposed pursuant to the Consent Decree.]

b) Scope of Right of Access:

1. The Grantees will have a right to cross the Unrestricted Use Area to access the Restricted Commercial/Industrial/Recreational Use Area and the Restricted Waste Management Area.
2. The Grantees will have a right of access to the portions of the Restricted Commercial/Industrial/Recreational Use Area where remedial construction is taking place for so long as that construction is taking place. The Grantees will have a right of access to those portions of the site where there will be contained waste, caps or monitoring wells for so long as the containment remedy, caps or monitoring wells are required to be maintained.
3. The Grantees will have a right of access to the entire Restricted Waste Management Area until certification of completion of the Work and for so long as the containment remedy, caps or monitoring wells are required to be maintained.
4. Only the United States and the EPA, and their contractors and agents, have a right to access the site to implement the Work.

4. Reserved rights of Grantor: Grantor hereby reserves unto itself, its successors, and assigns, all rights and privileges in and to the use of the Property which are not incompatible with the restrictions, rights, covenants and easements granted herein. Grantor further reserves to itself the right to convey to Ocean County or the Township of Dover land other than that located in the Restricted Waste Management Area for the construction of public roadways.
5. Federal authority: Nothing in this document shall limit or otherwise affect EPA's rights of entry and access or EPA's authority to take response actions under CERCLA, the NCP, or other federal law.
6. No public access and use: No right of access or use by the general public to any portion of the Property is conveyed by this instrument.
7. Public notice: Grantor agrees to include in each instrument conveying any interest in any portion of the Property, including but not limited to deeds, leases and mortgages, a notice which is in substantially the following form:

**NOTICE: THE INTEREST CONVEYED HEREBY IS
SUBJECT TO AN ENVIRONMENTAL PROTECTION
EASEMENT, DATED _____, 2001, RECORDED IN
THE COUNTY CLERK'S OFFICE, OCEAN COUNTY,
STATE OF NEW JERSEY, ON _____, 2001 __, IN
BOOK _____, PAGE _____, IN FAVOR OF, AND
ENFORCEABLE BY, THE [insert name of grantee] AND BY
THE UNITED STATES OF AMERICA AND THE STATE
OF NEW JERSEY AS THIRD PARTY BENEFICIARIES.**

Within thirty (30) days of the date any such instrument of conveyance is executed, Grantor agrees to provide Grantee and EPA with a certified true copy of said instrument and, if it has been recorded in the public land records, its recording reference.

8. Enforcement: The Grantee shall be entitled to enforce the terms of this instrument by resort to specific performance. All remedies available hereunder shall be in addition to any and all other remedies at law or in equity, including CERCLA. Any forbearance, delay or omission to exercise Grantee's rights under this instrument in the event of a breach of any term of this instrument shall not be deemed to be a waiver by the Grantee of such term or of any of the rights of the Grantee under this instrument.
9. Waiver of certain defenses: Grantor hereby waives any defense of laches, estoppel, or prescription.
10. Covenants: Grantor hereby covenants to and with the Grantee and its assigns, that the Grantor is lawfully seized in fee simple of the Property, that the Grantor has a good and

lawful right and power to sell and convey it or any interest therein, subject only to the encumbrances listed in Exhibit B, that the Property is free and clear of encumbrances and that the Grantor will forever warrant and defend the title thereto and the quiet possession thereof.

11. Notices: Any notice, demand, request, consent, approval, or communication under this instrument that either party desires or is required to give to the other shall be in writing and shall either be served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor:

To Grantee:

A copy of each such communication shall also be sent to the following:

To EPA:

To NJDEP:

Chief, New Jersey Superfund Branch
Emergency and Remedial Response Division
U.S. Environmental Protection Agency, Region II
290 Broadway, 19th Floor
New York, NY 10007-1866
Attention: Ciba Geigy Superfund Site
Remedial Project Manager

[Insert name and address]

and to:

Chief, New Jersey Superfund Branch
Office of Regional Counsel
U.S. Environmental Protection Agency, Region II
290 Broadway, 17th Floor
New York, NY 10007-1866
Attention: Ciba Geigy Superfund Site Attorney

12. General provisions:

a) Controlling law: The interpretation and performance of this instrument shall be governed by the laws of the State of New Jersey.

- b) Liberal construction: Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the grant to effect the purpose of this instrument and the policy and purpose of CERCLA. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.
- c) Severability: If any provision of this instrument, or the application of it to any person or circumstance, is found to be invalid, the remainder of the provisions of this instrument, or the application of such provisions to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby.
- d) Entire agreement: This instrument and those portions of the Consent Decree to which it refers set forth the entire agreement of the parties with respect to rights and restrictions created hereby and supersede all prior discussions, negotiations, understandings, or agreements relating thereto, all of which are merged herein; provided that nothing in this instrument shall be deemed to alter or modify the Consent Decree.
- e) No forfeiture: Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.
- f) Joint obligation: If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.
- g) Successors: The covenants, easements, terms, conditions, and restrictions of this instrument shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors, and assigns and shall continue as a servitude running in perpetuity with the Property. The term "Grantor", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantor" and their personal representatives, heirs, successors, and assigns. The term "Grantee", wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantee" and their personal representatives, heirs, successors, and assigns.
- h) Captions: The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.
- i) Counterparts: The parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the

event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

j) Third-Party Beneficiary: Grantor and Grantee hereby agree that EPA and NJDEP shall be, on behalf of the public, third-party beneficiaries of the benefits, rights and obligations conveyed to Grantee in this instrument; provided that nothing in this instrument shall be construed to create any obligations on the part of EPA or NJDEP.

TO HAVE AND TO HOLD unto the Grantee and its assigns forever.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

Executed this _____ day of _____, 2001.

By: _____

Its: _____

STATE OF _____)
) ss
COUNTY OF _____)

On the _____ day of _____ in the year _____ before me personally came _____ to me known, who, being duly sworn, did depose and say that he/she/they reside(s) in _____ [if the place of residence is in a city, include the street and street number, if any, thereof]; that he/she/they is [are] the [president or other officer or director or attorney in fact duly appointed] of the [name corporation], the corporation described in and which executed the above instrument; that he/she/they know(s) the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by authority of the board of directors of said corporation, and that he/she/they signed his/her/their name(s) thereto by like authority.

Witness my hand and official seal hereto affixed the day and year written above.

Notary Public in and for the
State of

My Commission Expires: _____

This instrument is accepted this day of , 20 .

[insert name of grantee]

By: _____

STATE OF _____)
) ss
COUNTY OF _____)

On the _____ day of _____ in the year _____ before me personally came _____ to me known, who, being duly sworn, did depose and say that he/she/they reside(s) in _____ [if the place of residence is in a city, include the street and street number, if any, thereof]; that he/she/they is [are] the [president or other officer or director or attorney in fact duly appointed] of the [name corporation], the corporation described in and which executed the above instrument; that he/she/they know(s) the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by authority of the board of directors of said corporation, and that he/she/they signed his/her/their name(s) thereto by like authority.

Witness my hand and official seal hereto affixed the day and year written above.

Notary Public in and for the
State of

My Commission Expires: _____

Attachments:

Exhibit A	-	legal description of the Property
Exhibit B	-	List of encumbrances